# NWO's evidence based CV

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### Launch of narrative CV in 2019



#### **Background:**

- Introduction of initial selection on quality of the researcher (reduction of application pressure);
- Recognition there is no ideal type of academic, no particular set of qualities that is inevitably most important;
  - Flexible format, in which all types of academics can show and substantiate their (relevant) qualities;
- Wish to refocus the CV on: What is it that shows us you are talented, that your work is of exceptional quality and that your profile fits or will fit the proposed research?

Disclaimer: The NWO-format has been developed to find qualities that are relevant in competitive research assessment.



### Responsible assessment: if the CV matters

- Room for explanation, substantiation/evidence and context in CV and assessment;
- N-Best<sup>1</sup>: focus on **essence** what is it that most clearly shows the quality of the research(er)?
- Applicant chooses what to highlight committees assess choice, substantiation and quality;
- Increased visibility of Open Science where it counts;
- Broader term 'output' replaces 'publications';
- No sub-headings for aspects that are not mandatory.



### Narrative CV format (2019 – 2022)

#### 4. Curriculum Vitae

#### 4a. Academic profile

Provide a comprehensive narrative of your academic achievements, research focus, research agenda, position in your (inter)national academic field, motivation, and the academic and societal potential of your work. (Max. 1.000 words)

Wordcount:

#### 4b. Key output

Provide the references to your key output (max. 10) and add a motivation for the selection of each of these items. Please also number the items. You are allowed to use a hyperlink that refers to the article directly. You are not allowed to mention H-indexes, journal impact factors, or any type of metric that refers to the journal, publisher, or publication platform, rather than to the individual output item. For more information, see the Explanatory Notes.

(Max. 10 items. Min. 400 words - max. 700 words, excl. output titles and references to the output)

Wordcount:



## Things we don't want to see or have moved

We don't want to see	Reason
Full publication lists, total numbers	Content over quantity, bias, 'publish or perish'
First names/indications of gender	Gender bias
Journal/publisher lev. indicators, author level indicators, e.g. averages/indices;	Bad proxies for individual quality. We use N-best <sup>1</sup> : a few research products as primary locus of evaluation. These indicators measure at a different level;

We moved	Reason
Necessary data that should not influence the assessment or only serves as context-information has been moved to the bottom of the form, e.g.:  Personal details;  Administrative details (e.g. PhD date, net research time)	Anchoring effect: a (robust) cognitive bias where an individual depends too heavily on an initial piece of information offered to make subsequent judgements during decision making <sup>2</sup> .  Even if some reviewers look at h-index online, it's likely that our policies still have a positive effect.



<sup>1.</sup> Frank, M. C. (2019). N-best evaluation for academic hiring and promotion. *Trends in Cognitive Sciences*, 23(12), 983-985.

<sup>2.</sup> Yoon, S., Fong, N. M., & Dimoka, A. (2019). The robustness of anchoring effects on preferential judgments. Judgment & Decision Making, 14(4).

### Evaluation: the positive

Results from applicant & juror surveys and external analysis are **mostly positive**:

- Quality of the applicants can be judged fairly easily;
- Drafting CV takes some time (median 30-40hrs). Application pressure goal is achieved:
  - Macro-level 59% reduction in time spent on Veni-procedure by applicants;
  - Applicants that write a preproposal and full proposal do not spend more time than before.
- Appreciation for attention quality, content, and impact over journal & aggregate metrics;
- Increased consensus amongst external reviewers;
- No striking changes amongst laureates in effective research time, gender, etc. Chances for female researchers have slightly increased (but not significantly);
- No major shift in terms of career path. Some indications of a more diverse selection



# Evaluation: Beyond the journals

- 2020: 21 out of 96 SSH laureates listed non-traditional output;
- The nature of the outputs and scientific disciplines varied widely;
- Examples included: a documentary about digital infrastructure to support the social revolution in Indonesia and an app that many speech therapists already use to treat children with certain brain disorders, an online overview of radical political parties in Europe, popular among political scientists and journalists. There were opinion articles on climate migration, archeology lessons tailored to indigenous Amazonians, a software package to extract statistics from scientific articles, and a sawed-through bunker that puts heritage in a new perspective.

• See: <a href="https://www.nwo.nl/en/news/science-beyond-journals">https://www.nwo.nl/en/news/science-beyond-journals</a>

21/12/22

### Evaluation – Concerns and room for improvement

- **Potential risk**: Gender difference in self-promotion might lead to bias. But: no indications of this effect at NWO. Unsubstantiated bragging lead to negative scores.
  - Related: Analysis of SNSF SciCV by CWTS found no indications of gender differences in description of applicants or their achievements in the narratives<sup>3</sup>.
- Culture change is difficult, difficulty varies per field and cohort;
  - But: in all cases majority of applicants and committee members is positive;
- Communication: tendency to focus on 'rules' instead of 'why';
  - Strict reading of DORA and Recognition and Rewards
    - e.g. complaints about banning h-index when DORA does not do so explicitly;
  - False idea that all quantitative indicators are banned, often repeated by the same critics;
  - Need for explanation, context, and coaching for applicants, committees and NWO staff;
- Committees request some more structure and consistency in look/feel and use.



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Happy to provide clarification: DORA does not endorse the use of the H-index to assess individual researchers. The declaration does mention use of the journal Hindex, but only really as a small part of a strategy for distracting attention from the impact factor.



### Evidence Based CV (2023): General design unchanged

#### 1. Academic profile:

• Who are you as a researcher? What are your most relevant qualities and academic achievements? What is your vision and focus, and how does this reflect in your work? How have you used opportunities (e.g. grants), are there other circumstances that should be taken into account?

#### 2. Key output (max 10):

- Motivation required;
- Description of contribution requested (e.g. via CRediT Contributor Roles Taxonomy).
- Quality indicators are asked, preferably multiple per output item with explanation about what these indicators say about the quality of the work in this particular case. What evidence shows that this work is of high quality and/or that it is relevant to the proposed project?
  - All indicators allowed that measure at the level of one of the 10 key output items.



### Evidence Based CV [v0.9]: What's new?

- A separate section in the academic profile when leadership/mentorship skills are required;
  - Vidi (up to 8 years after PhD): planned approach;
  - Vici: (up to 15 years after PhD): experience and planned approach;
- More structure in the key output section:
  - Output consistently presented;
  - Some information required: reference, URL, output type and indicators of quality or relevance;
- Dropdown menu's providing clarity and showing diversity of options:
  - Types of output;
  - Types of quantitative and qualitative indicators;



### Evidence Based CV [v0.9 Vici] – a first look

#### 2a. Academic profile

In section 1 – General Academic Profile: Write a narrative highlighting your academic achievements that are most relevant to your field, other scientific fields, society and/or the research idea. Provide context and evidence of how the elements you choose to include show your academic qualities.

In section 2 – Leadership and mentorship: Highlight your approach to leadership and mentorship. Describe how you contributed to the development of individuals. You can add information on expertise that you provided that contributed to the success of your team or team members, including project management, collaborative contributions, and team support. Section 2 can also be used to describe the establishment of collaborations, disciplinary and interdisciplinary, institutional, national and international. It can be used to detail where you exerted strategic leadership, how you shaped the direction of a team, organisation, company or institution.

For more information, expand the Explanatory Notes
(Total word limit section 1 + section 2 = min. 600 - max. 1200 words)

Academic Profile section 1 - General Academic Profile

Section 2: Leadership and mentorship



### Evidence Based CV [v0.9] – a first look

### 2b. Key output

Per key output item (max 10) provide the reference to the output, add a direct link (preferably a DOI), select the output type and choose at least one indicator that best demonstrates the quality of the output. Under 'motivation' explain the selection of each of the output items and indicators. You may choose to combine the explanation for multiple key output items. Describe your contribution to the output, especially in case of multi-author output. Mark output that is available in open access by ticking the checkbox behind "Open Access".

When selecting quality indicators you may only use ones that meet the Guidelines for the use of quality indicators in the General Notes. The indicator drop-down menus contain a list of approved indicators.

For more information, expand the Explanatory Notes.

(Max. 10 items. Min. 400 words - max. 700 words, excl. references, URLs and indicators)

Key output 1	Open Access: □
Reference:	
URL:	
Type: Choose an output type	
Quality indicators:	
1) Choose an indicator	
2) Optional: choose a second indicator	

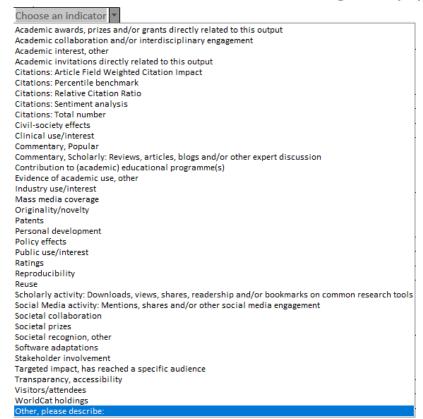
Motivation:



3) Optional: choose a third indicator

### Evidence Based CV [v0.9] – a first look

- Output types: from peer reviewed articles to exhibitions, technical reports to datasets;
- Indicators: from citations to originality, policy effects to personal development



#### Article, non-refereed Article, popular/news media Article, refereed Artwork Audio Blog Book, authored Book chapter Book, edited Book (popular) Code Commentary or perspective piece Composition Conference abstract Conference paper Conference presentation Conference proceedings Conference report Corrigendum Dataset Design Digital scholarship Dramatic or Literary Text Editorial comment Exhibition Fileset Interview Invited talk Lecture series Letter (to editor) Methodology/techniques Monograph Opinion article Outreach/public engagement/advocacy, other Patent, copyright or trademark Performance Policy paper Poster Pre-print Protocol Public talk Reagent Report (technical or commissioned) Review article Software Thesis/dissertation Tool Translation Visual media Working paper Workshop

Other, please describe

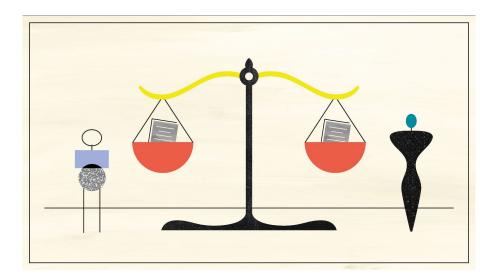
Choose an output type

### Trade-offs

- Freedom to shape the CV (applicant preference) vs. Consistency of CVs (committee preference);
- Limiting influence of pseudo-accuracate metrics vs. Clarity about permitted indicators;
- Evidence informed policy vs. Legitimacy and percieved procedural justice:

What research tells us works best is not necessarily what people expect from an assessment procedure or think of as valid and fair.

On the whole the balance has shifted somewhat, but the general approach remains the same.

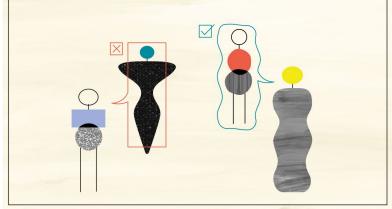


### Final comments

The CV format is only part of the equation. Succes also depends on:

- Who performs the assessment. Committee composition matters (e.g. diversity & skills);
- Instruction for applicants and committees;
- Training and calibration for committees and those coordinating the assessment procedures;
- Accepting that comparing often very good, but very different researchers is not easy. It requires time and effort;
- Accepting that researcher assessment is not an exact science with one optimal outcome.
   Rather, we attempt to come to a valid, substantiated end result;

 Performativity: Funder CVs, instruction, communication etc. can send a broader positive message about what is valued in academia.



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