Test: DELPHi / DIY (circle one)

Universidad de La Laguna (Spain), 26 January 2022

Your initials:

2018

- **Question 1:** Is the candidate gene a transcription factor or part of a transcription complex?

Gene	Transcription factor / part of transcription complex? (Y/N)
HIF1A	
SMAD3	
TRAF2	
CEBPA	Y Y X

- **Question 2:** Is the candidate gene involved in an immune signalling pathway, i.e. a pathway that is immune cell-specific or a generic pathway known to operate in immune cells (e.g. the JAK-STAT, MAPK, NF-kappa B or TNF signalling pathways) ?

  You can also consider blood cell-specific pathways like leukaemias.

Gene	Annotate relevant pathways
HIF1A	
SMAD3	
TRAF2	
CEBPA	Y AML NF-kappa B

- **Question 3:** Can you write down the known protein binding partners (if any) of each candidate gene ?

Gene	Annotate relevant pathways
HIF1A	
SMAD3	
TRAF2	
CEBPA	FOXOL_MOUSE KDM1A_MOUSE

CDAZ
CDK4

- **Question 4:** Can you write down the diseases each candidate gene is associated with?

Gene	Annotate relevant pathways
HIF1A	
SMAD3	
TRAF2	
CEBPA	Acute Myeloid leukemia

leukemia

- **Question 5:** For each candidate gene, can you find a genetic phenotype that produces an abnormal immune phenotype or disease?

Gene	Annotate relevant pathways
HIF1A	
SMAD3	
TRAF2	
CEBPA	abnormal B cell proliferation blood all

- **Question 6:** Are any of the candidate genes expressed in a type of immune cell or in a tissue or organ where immune cells are known to reside (e.g. the bone marrow, thymus, spleen and lymph nodes) ?

Gene	Annotate relevant pathways
HIF1A	
SMAD3	
TRAF2	
CEBPA	~~Brown fat~~ Bone marrow macrophages.

- **Question 7:** Have any of the candidate genes been studied in the context of macrophages?

Gene	PMID of paper
HIF1A	
SMAD3	
TRAF2	
CEBPA	Y

Y

System Usability Scale

© Digital Equipment Corporation, 1986.

	Strongly disagree 1	2	3	4	Strongly agree 5	
1. I think that I would like to use this system frequently				X		3
2. I found the system unnecessarily complex		X				3
3. I thought the system was easy to use				X		3
4. I think that I would need the support of a technical person to be able to use this system	X					4
5. I found the various functions in this system were well integrated				X		3
6. I thought there was too much inconsistency in this system	X					4
7. I would imagine that most people would learn to use this system very quickly					X	4
8. I found the system very cumbersome to use		X				3
9. I felt very confident using the system				X		3
10. I needed to learn a lot of things before I could get going with this system	X					4

18
+ 16
34

34

34 × 2.5 = 85

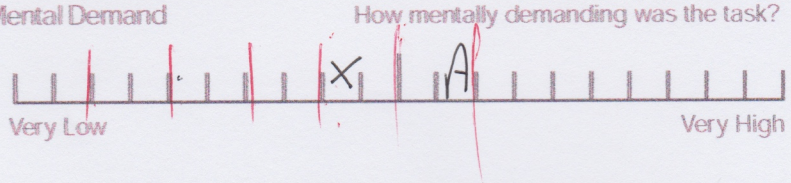
Figure 8.6

NASA Task Load Index

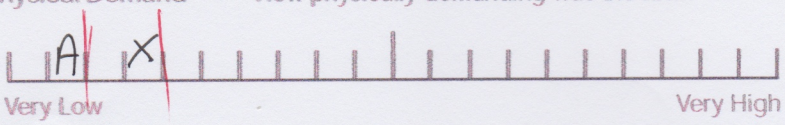
Hart and Staveland's NASA Task Load Index (TLX) method assesses work load on five 7-point scales. Increments of high, medium and low estimates for each point result in 21 gradations on the scales.

Name	Task	Date

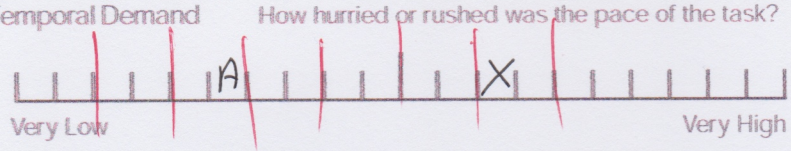
Mental Demand — How mentally demanding was the task?



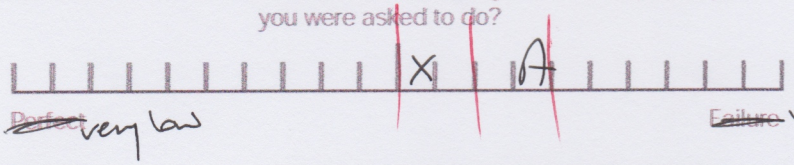
Physical Demand — How physically demanding was the task?



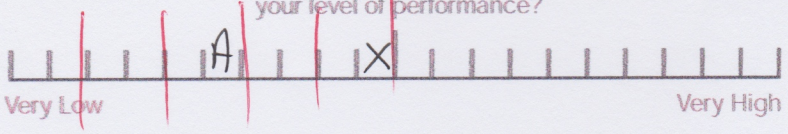
Temporal Demand — How hurried or rushed was the pace of the task?



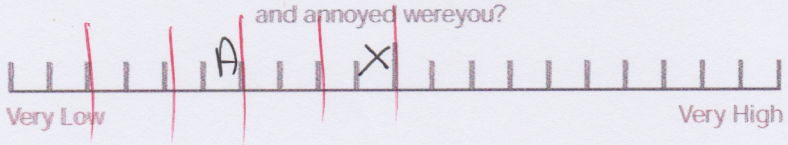
Performance — How successful were you in accomplishing what you were asked to do?



Effort — How hard did you have to work to accomplish your level of performance?



Frustration — How insecure, discouraged, irritated, stressed, and annoyed wereyou?



[redacted]

Total: 1h 10'

	Errors		Errors
①	40" ~~1'18'~~ none	Google scholar 38"	↳ Lo encontró en un abstract
②	1'25"	vcells.net → Uniprot	1'14"
③	30"	String DB → page not working →	Biogrid 2' 10"
④	10"	Fue a papers directamente (en vez de a OMIM.	1'05"
⑤	28"	Google Scholar (paying through papers) ↓↑ PubMed	3'38"
⑥	45"	~~3'38"~~ Vcells.net	17"
⑦	1' 20"	vcells.net	10"

"Útil para 1ras búsquedas, y luego ya pasas a tus herramientas detalladas."

(1) How useful do you think the interface is?

a partir de ahí cuando se busca más profundidad ya vas en detalle a artículos, etc.

"La veo como una Wikipedia científica"

La idea de entrar a Wikipedia la primera vez no es tener una idea rigurosa sino una idea general de qué es eso. Esta app te ofrece esa función con el interés añadido que te organiza la información con vínculos a fuentes originales.

(2) What would you like to add/improve?

- La mejor forma es venderlo es como un "Google de genes" para tener un punto de entrada más que una herramienta para procesar información.

(3) What things did you not like?

- tamaño letra
- le faltó un enlace a la secuencia directamente, o una imagen a la estructura 3D de la proteína. → y citar la evolución de los papers porque es una tendencia general de que cada vez se publica más.

(4) Otros comentarios

"Cuando usas una herramienta nueva siempre vas a tener un esfuerzo extra / energía de activación para adaptarse a la aplicación ~~no~~ por más útil que sea"

↓

es a barrera la tenía ya superada con las herramientas que ya conoce.

↓

pero esa barrera en el prototipo va a superarla mucho más rápidamente que con las otras.

→ si se hubiera entrenado antes, los tiempos hubieran sido mejores. Esto lo penalizó.

La gente tiene una visión reduccionista de los sistemas y aunque le pongas la mejor herramienta del mundo, hay muchos experimentalistas que sólo van a buscar sus dos proteínas de interés. → por lo tanto, cómo vendo la herramienta ahí e introduzco un cambio de mentalidad.