

**APPENDIX. LATEST VERSION OF THE IMAGE ANALYSIS INFRASTRUCTURE REPORT
(2021)**

Name of infrastructure: IMAGE ANAYSIS SOFTWARE PLATFORM

Infrastructure manager: Megg Garcia (PhD student; PhD supervisor: Tomas Deierborg)

PI contact person: Gunnar Gouras

1. Short description of the infrastructure.

This platform is increasingly used and since the beginning of the year is requesting user fees.

This platform consists of a computer workstation with Imaris for Neuroscientists version 9.3 software. This software is especially suited for 3D/4D visualization of images that have been acquired from e.g. a confocal microscope. The Neuroscience package of Imaris, in particular, allows for neuron tracing but can work with other cells types or structures that branch or are filamentous in nature. In addition, users may use this software package to detect and measure spots and surfaces.

2. Is this infrastructure receiving support also from other Strategic Research Areas (SRAs) or organizations at Lund University (e.g. Medical faculty, LBIC). If yes, please specify the type of support and its amount.

No, this infrastructure is not supported by any other organization.

3. Number and names of MultiPark senior researchers using the infrastructure in the period 2018-2020¹

Seven: Gunnar Gouras, Oxana Klementieva, Iben Lundgaard, Niklas Marklund. Angela Cenci Nilsson, Tomas Deierborg, Gesine Paul

4. Number and names of senior researchers outside of Multipark and/or non-academic partners using the infrastructure 2018-2020.

Three: Paul Bourguine (EMV; WMMC); Gabriela Godaly; Catharina Svanborg;

Use of the software in Q1 2021:

TO BE CHARGED						
Groups →	Cancer Infect.*	CTO* (Bourguine)	Exp Dementia (Gouras)	Glia-Immune Interact. (Lundgaard)	LUBIN (Marklund)	MMS (Klementieva)
	Catharina S.*	Paul B.*	Gunnar G.	Iben L.	Ilknur Özen	Oxana K.
Total cost (SEK)	2145,90	1291,70	91,70	75,00	150,00	137,50

*External to MultiPark

Use of the software in Q2 2021:

TO BE CHARGED

Groups →	Med		Exp.		Transl.
	Microbio.*	CTO*	Dementia	Neurosurgery	Neurol.
	Gabriela G.	Paul B.	Gunnar G.	Niklas M.	Gesine P.
	314275	314336	314071	314344	314344
Total cost(SEK)	1353,3	769,2	87,5	87,5	50,0

5. Does the infrastructure have a steering document accessible to the users? If yes, when was it last updated?²

An updated steering document is being submitted with this application.

6. Is the infrastructure charging user fees? If yes, state the amount and what is covered by the user fees.

Yes, see Table:

Current user fees for the Image analysis platform (since January 1, 2021):

Rates

	MultiPark User	External user
Normal rate (workdays between 8-18)	50 SEK/hour	100 SEK/hour
Low-traffic rate (red days, weekends, weekdays between 18 - 8)	25 SEK/hour	50 SEK/hour

7. List publications generated with the help of this infrastructure during the past 3 years (2018-2020). Do not include manuscripts in preparation and please give the full reference (i.e., complete author list, complete title, journal name with year, volume, pages)³.

Konings SC, Torres-Garcia L, Martinsson I, Gouras GK. Astrocytic and Neuronal Apolipoprotein E Isoforms Differentially Affect Neuronal Excitability. *Front Neurosci.* 2021 Sep 21;15:734001. doi: 10.3389/fnins.2021.734001. eCollection 2021. PMID: 34621153

Roos TT, Garcia MG, Martinsson I, Mabrouk R, Israelsson B, Deierborg T, Kobro-Flatmoen A, Tanila H, Gouras GK. Neuronal spreading and plaque induction of intracellular A β and its disruption of A β homeostasis. *Acta Neuropathol.* 2021 Oct;142(4):669-687. doi: 10.1007/s00401-021-02345-9. Epub 2021 Jul 16. PMID: 34272583

Paulus A, Engdahl A, Yang Y, Boza-Serrano A, Bachiller S, Torres-Garcia L, Svanbergsson A, Garcia MG, Gouras GK, Li JY, Deierborg T, Klementieva O. Amyloid Structural Changes Studied by Infrared Microspectroscopy in Bigenic Cellular Models of Alzheimer's Disease. *Int J Mol Sci.* 2021 Mar 26;22(7):3430. doi: 10.3390/ijms22073430. PMID: 33810433