

## Newsletter of the Vascular Biology Institute – 2022/4

New publications with team members as first- or corresponding author .....	2
Groups of Alice Assinger & Waltraud Schrottmaier .....	2
Cell Reports .....	2
Curr Top Microbiol Immunol .....	3
Bernhard Hochreiter / Johannes Schmid .....	4
Frontiers in Cell Dev. Biol.: FRET-Cytometry .....	4
Johannes Schmid .....	5
Atherosclerosis: (Commentary Article) .....	5
New publications as co-author .....	5
Gernot Schabbauer (as co-corresponding author): .....	5
Cell Reports .....	5
Pavel Uhrin: .....	5
J. Ethnopharmacology .....	5
Assinger/Schrottmaier: .....	6
Blood .....	6
J. Hepatol. ....	6
Assinger: .....	6
RNA Biol. ....	6
Front Pharmacol. ....	6
Schrottmaier .....	7
FASEB J. ....	7
New funding and grants .....	7
Finished Master or PhD theses .....	7

## New publications with team members as first- or corresponding author

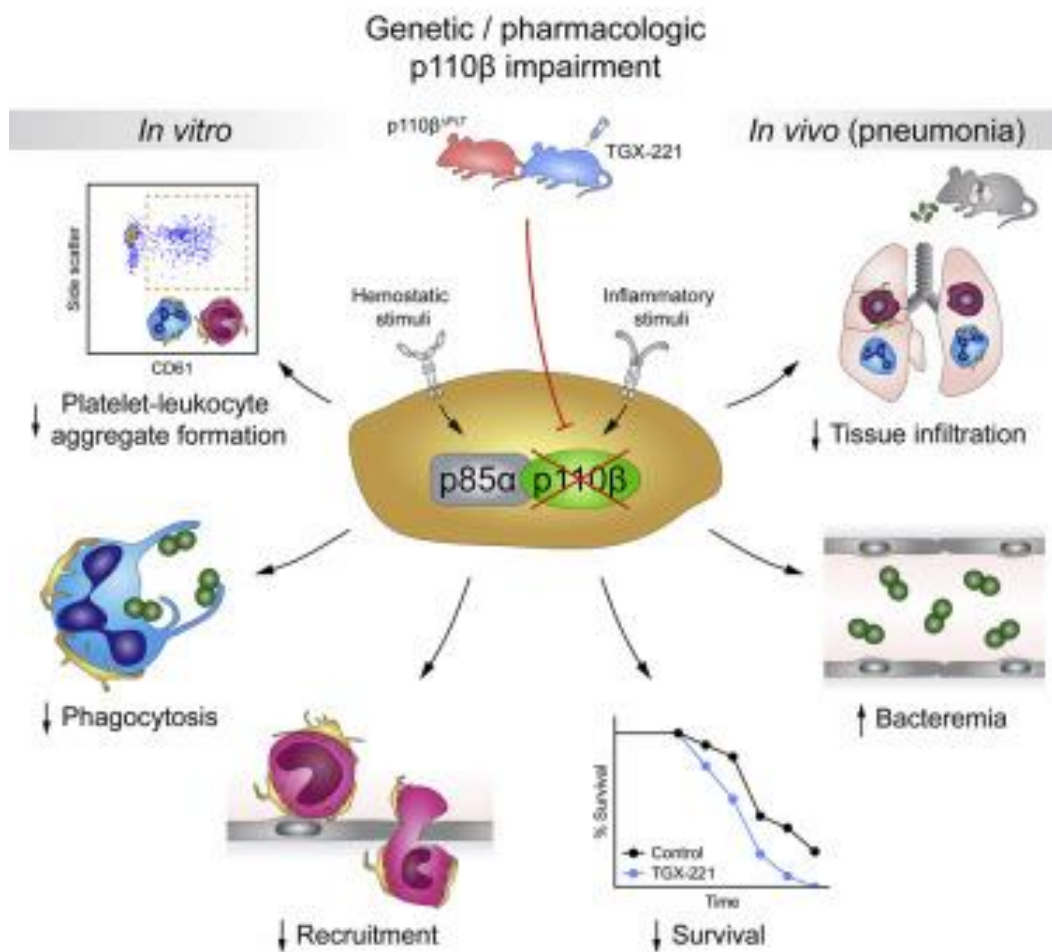
Groups of Alice Assinger & Waltraud Schrottmaier

### Cell Reports

#### Platelet p110 $\beta$ mediates platelet-leukocyte interaction and curtails bacterial dissemination in pneumococcal pneumonia;

Waltraud Cornelia Schrottmaier, Julia Barbara Kral-Pointner, Manuel Salzmann, Marion Mussbacher, Anna Schmuckenschlager, Anita Pirabe, Laura Brunthaler, Mario Kuttke, Barbara Maier, Stefan Heber, Hannes Datler, Yasemin Ekici, Birgit Niederreiter, Ulrike Heber, Bo Blomgren, Anna-Dorothea Gorki, Cecilia Söderberg-Nauclér, Bernard Payrastre, Marie-Pierre Gratacap, Sylvia Knapp, Gernot Schabbauer, Alice Assinger, Cell Reports, 42(6):11614; doi: <https://doi.org/10.1016/j.celrep.2022.111614>

### Immunomodulatory role of platelet p110 $\beta$







OPEN ACCESS

EDITED BY  
 Christos Gatsogiannis,  
 University of Münster, Germany

REVIEWED BY  
 Johannes Freitag,  
 University of Marburg, Germany  
 Michael Ginger,  
 University of Huddersfield,  
 United Kingdom

\*CORRESPONDENCE  
 Markus Kunze,  
 markus.kunze@meduniwien.ac.at

<sup>†</sup>These authors have contributed equally  
 to this work

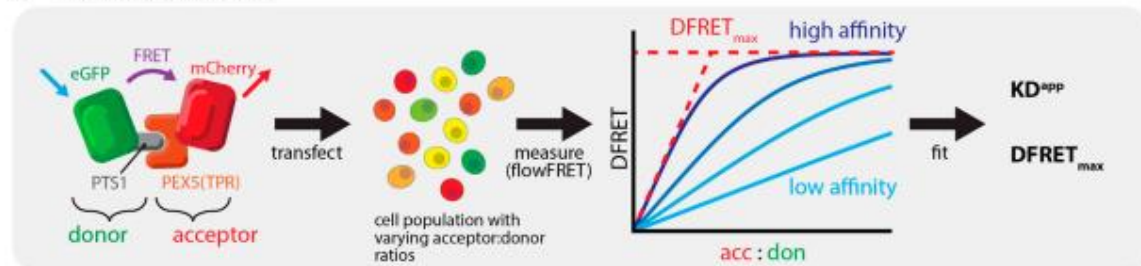
SPECIALTY SECTION  
 This article was submitted to Membrane  
 Traffic,  
 a section of the journal  
 Frontiers in Cell and Developmental

# Studying the interaction between PEX5 and its full-length cargo proteins in living cells by a novel Förster's resonance energy transfer-based competition assay

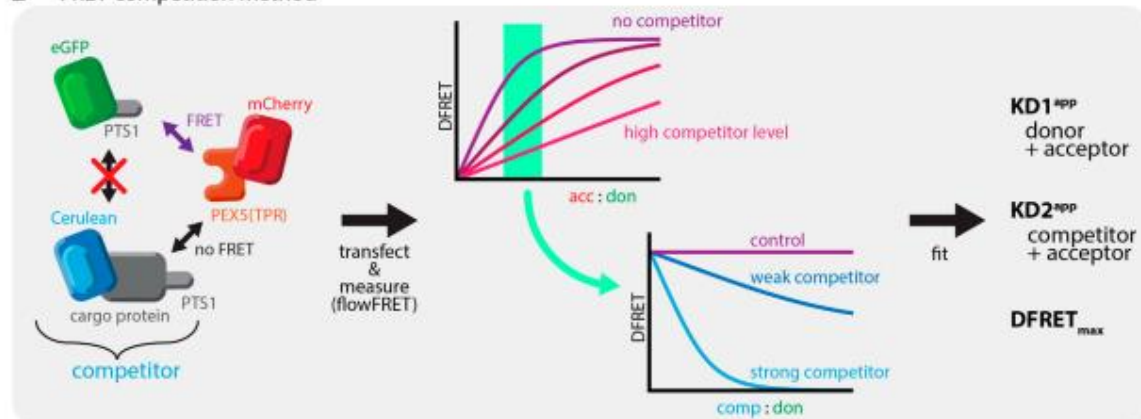
Bernhard Hochreiter<sup>1†</sup>, Hugo Malagon-Vina<sup>2†</sup>,  
 Johannes A. Schmid<sup>1</sup>, Johannes Berger<sup>3</sup> and Markus Kunze<sup>3\*†</sup>

<sup>1</sup>Institute for Vascular Biology and Thrombosis Research, Center for Physiology and Pharmacology, Medical University of Vienna, Vienna, Austria, <sup>2</sup>Department of Cognitive Neurobiology, Center for Brain Research, Medical University of Vienna, Vienna, Austria, <sup>3</sup>Department of Pathobiology of the Nervous System, Center for Brain Research, Medical University of Vienna, Vienna, Austria

## A FRET-titration method



## B FRET-competition method

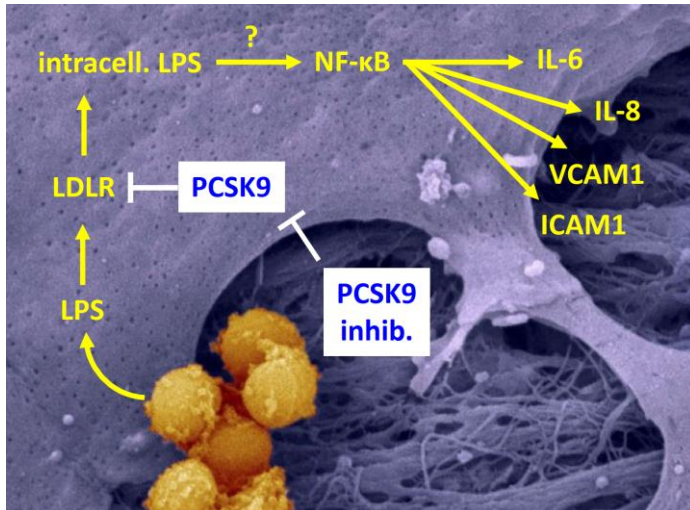


Johannes Schmid

## Atherosclerosis: (Commentary Article)

### PCSK9 inhibition might increase endothelial inflammation

[https://www.atherosclerosis-journal.com/article/S0021-9150\(22\)01499-X/fulltext](https://www.atherosclerosis-journal.com/article/S0021-9150(22)01499-X/fulltext)



## New publications as co-author

Gernot Schabbauer (as co-corresponding author):

### Cell Reports

[Platelet p110 \$\beta\$  mediates platelet-leukocyte interaction and curtails bacterial dissemination in pneumococcal pneumonia – see above: Assinger/Schrottmaier](#)

Waltraud Cornelia Schrottmaier, Julia Barbara Kral-Pointner, Manuel Salzmann, Marion Mussbacher, Anna Schmuckenschlager, Anita Pirabe, Laura Brunnthaler, Mario Kuttke, Barbara Maier, Stefan Heber, Hannes Datler, Yasemin Ekici, Birgit Niederreiter, Ulrike Heber, Bo Blomgren, Anna-Dorothea Gorki, Cecilia Söderberg-Nauclér, Bernard Payrastre, Marie-Pierre Gratacap, Sylvia Knapp, Gernot Schabbauer, Alice Assinger, Cell Reports, 42(6):111614; doi: 10.1016/j.celrep.2022.111614

Pavel Uhrin:

### J. Ethnopharmacology

<https://www.sciencedirect.com/science/article/pii/S0378874122005487?via%3Dihub>

C-geranylated flavonoids from *Paulownia tomentosa* Steud. fruit as potential anti-inflammatory agents: Lenka Molčanová, Jakub Tremel, Veronika Brezáni, Petr Maršík, Sebnem Kurhan, Zdeněk Trávníček, **Pavel Uhrin**, Karel Šmejkal

## Assinger/Schrottmaier:

### Blood

#### [S100A8/A9 drives the formation of procoagulant platelets through GPIb \$\alpha\$ .](#)

Colicchia M, Schrottmaier WC, Perrella G, Reyat JS, Begum J, Slater A, Price J, Clark JC, Zhi Z, Simpson M, Bourne J, Poulter NS, Khan AO, Nicolson PLR, Pugh MR, Harrison P, Iqbal AJ, Rainger GE, Watson SP, Thomas MR, Mutch NJ, Assinger A, Rayes J. *Blood*. 2022 Aug 26;blood.2021014966. doi: 10.1182/blood.2021014966. Online ahead of print.PMID: 36026606

### J. Hepatol.

#### [Hepatectomy-induced apoptotic extracellular vesicles stimulate neutrophils to secrete regenerative growth factors.](#)

Brandel V, Schimek V, Göber S, Hammond T, Brunthaler L, Schrottmaier WC, Mussbacher M, Sachet M, Liang YY, Reipert S, Ortmayr G, Pereyra D, Santol J, Rainer M, Walterskirchen N, Ramos C, Gerakopoulos V, Rainer C, Spittler A, Weiss T, Kain R, Messner B, Gruenberger T, Assinger A, Oehler R, Starlinger P.J *Hepatol*. 2022 Aug 16:S0168-8278(22)02993-2. doi: 10.1016/j.jhep.2022.07.027. Online ahead of print.PMID: 35985549 **Free article.**

## Assinger:

### RNA Biol.

#### [Thrombosis-related circulating miR-16-5p is associated with disease severity in patients hospitalised for COVID-19.](#)

Eyileten C, Wicik Z, Simões SN, Martins-Jr DC, Klos K, Wlodarczyk W, Assinger A, Soldacki D, Chcialowski A, Siller-Matula JM, Postula M.*RNA Biol*. 2022 Jan;19(1):963-979. doi: 10.1080/15476286.2022.2100629.PMID: 35938548 **Free PMC article.**

### Front Pharmacol.

#### [Camostat Mesylate Versus Lopinavir/Ritonavir in Hospitalized Patients With COVID-19-Results From a Randomized, Controlled, Open Label, Platform Trial \(ACOVACT\).](#)

Karolyi M, Pawelka E, Omid S, Koenig F, Kauer V, Rumpf B, Hoepler W, Kuran A, Laferl H, Seitz T, Traugott M, Rathkolb V, Mueller M, Abrahamowicz A, Schoergenhofer C, Hecking M, Assinger A, Wenisch C, Zeitlinger M, Jilma B, Zoufaly A. *Front Pharmacol*. 2022 Jul 22;13:870493. doi: 10.3389/fphar.2022.870493. eCollection 2022.PMID: 35935856 **Free PMC article.**

#### [Early administration of remdesivir may reduce mortality in hospitalized COVID-19 patients : A propensity score matched analysis.](#)

Karolyi M, Kaltenecker L, Pawelka E, Kuran A, Platzer M, Totschnig D, Koenig F, Hoepler W, Laferl H, Omid S, Seitz T, Traugott M, Arthofer S, Erlbeck L, Jaeger S, Kettenbach A, Assinger

A, Wenisch C, Zoufaly A. Wien Klin Wochenschr. 2022 Oct 27:1-9. doi: 10.1007/s00508-022-02098-9. Online ahead of print.

## Schrottmaier

### FASEB J

[Interleukin-4 receptor alpha signaling regulates monocyte homeostasis.](#)

Haider P, Kral-Pointner JB, Salzmann M, Moik F, Bleichert S, **Schrottmaier WC**, Kaun C, Brekalo M, Fischer MB, Speidl WS, Hengstenberg C, Podesser BK, Huber K, Pabinger I, Knapp S, Brombacher F, Brostjan C, Ay C, Wojta J, Hohensinner PJ. FASEB J. 2022 Oct;36(10):e22532. doi: 10.1096/fj.202101672RR. PMID: 36063138 Free PMC article.

## New funding and grants

CVC-Collaborative Cluster Grant: Anita Pirabe/Dino Mehic

## Finished Master or PhD theses

Assinger group: Kerstin Kammerer (MD)