INSTITUT FÜR PROPHYLAXE & EPIDEMIOLOGIE DER KREISLAUFKRANKHEITEN (IPEK)

DIREKTOR: UNIV.-PROF. DR. CHRISTIAN WEBER

ANZAHL DER HAUSHALTFINANZIERTEN WISSENSCHAFTLICHE MITARBEITER: 25

ANZAHL DER HAUSHALTFINANZIERTEN NICHT-WISSENSCHAFTLICHE MITARBEITER: 18

ANZAHL ALLER DRITTMITTELFINANZIERTEN MITARBEITER: 80

DRITTMITTELAUSGABEN (IN €):

	Anzahl Projekte	Ausgaben 2019
DFG	38	3.957.574
BMBF, StMWFK	20	1.415.996
EU	6	643.389
Stiftungen (Humboldt, Fondation Leducq, etc.)	12	372.172
Summe begutachtete externe Drittmittel	**76**	**6.389.131**

	Anzahl Projekte	Ausgaben 2019
FöFoLe	3	1248
Promotionsstipendien	3	14.337
Summe interne Drittmittel		**15.585**

Gesamtsumme verausgabte Drittmittel		**6.404.716**

PUBLIKATIONEN:

	Anzahl	ungewichteter IF
im WoS gelistete Originalarbeiten	58	605,9
im WoS gelistete Reviews, Editorials	42	433,7
Gesamtsumme	**100**	**1037**

FORSCHUNGSSCHWERPUNKTE

- Chemokine und Chemokinrezeptoren bei entzündlicher und atherogener Leukozytenrekrutierung
- Versatile Regulation der Atherosklerose durch microRNAs
- Funktion der Neutrophilen und Ihrer Sekretion in frühen Stadien der Atherosklerose
- Rolle von Chemokinen und Chemokin-ähnliche Funktionen von MIF in der Atherosklerose und Restenose
- Struktur und Funktion der Heterooligomerisierung und Proteoglykanbindung von Chemokinen (‚Interaktom')
- Signaltransduktion der Integrinregulation in Leukozyten und der endothelialen Aktivierung durch Zytokine
- Junktionale Adhäsionsmoleküle in der transendothelialen Diapedese und der vaskulären Entzündungsreaktion
- Chemokine und ihre Rezeptoren in der myokardialen Ischäme-Reperfusion und bei MyokardInfarkt
- Rolle von Leukozytensubpopulationen (Monozyten, T Zellen, dendritische Zellen, Mastzellen) in der Atherosklerose
- Regulation der Homöstase und Rekrutierung vaskulärer Vorläuferzellen in der Atherosklerose und nach Infarkt
- Physiologie und Pathophysiologie endothelialer Vorläuferzellen in der Endothelregeneration und Risikobestimmung
- Statine zur Prävention der Endotheldysfunktion und miniaturisierte, eluierende Formgedächtnis- und Polymer-Stents
- Intravitalmikroskopie, 2-Photonmikroskopie und Mechanismen der Plaquedestabilisierung
- Transmembranäre Chemokine und proteolytische Spaltung durch ADAM Metalloproteasen
- Rolle des Endocannabinoidsystems in der Atherosklerose und Ischämie/Reperfusion
- Mechanismen von ApoE bei Entzündung, Alzheimer und Atherosklerose
- Neuroimmune Grenzflächen, Innervation und Autoimmunität in der Atherosklerose

PUBLIKATIONEN

Originalarbeiten, Reviews, Editorials - gelistet im Web of Science (WoS)

1. Aarts S, Reiche M, den Toom M, Gijbels M, Beckers L, Gerdes N, Lutgens E. Depletion of CD40 on CD11c(+) cells worsens the metabolic syndrome and ameliorates hepatic inflammation during NASH. Sci Rep. 2019;9:14702. ***(IF: 4,011)***
2. Aarts SA, Seijkens TT, Kusters PJ, van Tiel CM, Reiche ME, den Toom M, Beckers L, van Roomen CP, de Winther MP, Kooij G, Lutgens E.. Macrophage CD40-signaling drives experimental autoimmune encephalomyelitis. J Pathol. 2019;247:471-480. ***(IF: 5,942)***
3. Adrover JM, Del Fresno C, Crainiciuc G, Cuartero MI, Casanova-Acebes M, Weiss LA, Huerga-Encabo H, Silvestre-Roig C, Rossaint J, Cossio I, Lechuga-Vieco AV, Garcia-Prieto J, Gomez-Parrizas M, Quintana JA, Ballesteros I, Martin-Salamanca S, Aroca-Crevillen A, Chong SZ, Evrard M, Balabanian K, Lopez J, Bidzhekov K, Bachelerie F, Abad-Santos F, Munoz-Calleja C, Zarbock A, Soehnlein O, Weber C, Ng LG, Lopez-Rodriguez C, Sancho D, Moro MA, Ibanez B, Hidalgo A. A Neutrophil Timer Coordinates Immune Defense and Vascular Protection. Immunity. 2019 Jan; Epub. ***(IF: 21,522)***
4. Bartelt A, Leipsic J, Weber C. The new age of radiomic risk profiling: perivascular fat at the heart of the matter. Eur Heart J. 2019. ***(IF: 24,889)***
5. Bekkering S, Stiekema LCA, Bernelot Moens S, Verweij SL, Novakovic B, Prange K, Versloot M, Roeters van Lennep JE, Stunnenberg H, de Winther M, Stroes ESG, Joosten LAB, Netea MG, Riksen NP. Treatment with Statins Does Not Revert Trained Immunity in Patients with Familial Hypercholesterolemia. Cell Metab. 2019. ***(IF: 22,415)***
6. Beldman TJ, Malinova TS, Desclos E, Grootemaat AE, Misiak ALS, van der Velden S, van Roomen C, Beckers L, van Veen HA, Krawczyk PM, Hoebe RA, Sluimer JC, Neele AE, de Winther MPJ, van der Wel NN, Lutgens E, Mulder WJM, Huveneers S, Kluza E. Nanoparticle-Aided Characterization of Arterial Endothelial Architecture During Atherosclerosis Progression and Metabolic Therapy. ACS Nano. 2019. ***(IF: 13,903)***
7. Bianchini M, Duchene J, Santovito D, Schloss MJ, Evrard M, Winkels H, Aslani M, Mohanta SK, Horckmans M, Blanchet X, Lacy M, von Hundelshausen P, Atzler D, Habenicht A, Gerdes N, Pelisek J, Ng LG, Steffens S, Weber C, Megens RTA. PD-L1 expression on nonclassical monocytes reveals their origin and immunoregulatory function. Sci Immunol. 2019;4. (***IF: 10,551)***
8. Bijnen M, van de Gaar J, Vroomen M, Gijbels MJ, de Winther M, Schalkwijk CG, Wouters K. Adipose tissue macrophages do not affect atherosclerosis development in mice. Atherosclerosis. 2019;281:31-37.***(IF: 4,255)***
9. Boeltz S, Amini P, Anders HJ, Andrade F, Bilyy R, Chatfield S, Cichon I, Clancy DM, Desai J, Dumych T, Dwivedi N, Gordon RA, Hahn J, Hidalgo A, Hoffmann MH, Kaplan MJ, Knight JS, Kolaczkowska E, Kubes P, Leppkes M, Manfredi AA, Martin SJ, Maueröder C, Maugeri N, Mitroulis I, Munoz LE, Nakazawa D, Neeli I, Nizet V, Pieterse E, Radic MZ, Reinwald C, Ritis K, Rovere-Querini P, Santocki M, Schauer C, Schett G, Shlomchik MJ, Simon HU, Skendros P, Stojkov D, Vandenabeele P, Berghe TV, van der Vlag J, Vitkov L, von Köckritz-Blickwede M, Yousefi S, Zarbock A, Herrmann M. To NET or not to NET:current opinions and state of the science regarding the formation of neutrophil extracellular traps. Cell Death Differ. 2019 Jan; Epub. ***(IF: 8,184)***
10. Bollenbach A, Cordts K, Hanff E, Atzler D, Choe CU, Schwedhelm E, Tsikas D. Evidence by GC-MS that lysine is an arginase-catalyzed metabolite of homoarginine in vitro and in vivo in humans. Anal Biochem. 2019 Apr; Epub. ***(IF: 2,507)***
11. Bongiovanni D, Santamaria G, Klug M, Santovito D, Felicetta A, Hristov M, von Scheidt M, Aslani M, Cibella J, Weber C, Moretti A, Laugwitz KL, Peano C, Bernlochner I. Transcriptome Analysis of Reticulated Platelets Reveals a Prothrombotic Profile. Thromb haemost. 2019. ***(IF: 4,733)***
12. Bosch L, de Haan J, Seijkens T, van Tiel C, Brans M, Pasterkamp G, Lutgens E, de Jager S. Small molecule-mediated inhibition of CD40-TRAF6 reduces adverse cardiac remodelling in pressure overload induced heart failure. Int J Cardiol. 2018 Dec; Epub. ***(IF: 3,471)***
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14. Busygina K, Denzinger V, Bernlochner I, Weber C, Lorenz R, Siess W. Btk Inhibitors as First Oral Atherothrombosis-Selective Antiplatelet Drugs? Thromb Haemost. 2019 May;Epub. ***(IF: 4,733)***
15. Cassatella MA, Ostberg NK, Tamassia N, Soehnlein O. Biological Roles of Neutrophil-Derived Granule Proteins and Cytokines. Trends Immunol. 2019. ***(IF: 14,188)***
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17. Chen HJ, Li Yim AYF, Griffith GR, de Jonge WJ, Mannens M, Ferrero E, Henneman P, de Winther MPJ. Meta-Analysis of in vitro-Differentiated Macrophages Identifies Transcriptomic Signatures That Classify Disease Macrophages in vivo. Front Immunol. 2019; ***(IF: 4,716)***
18. Chen PY, Qin L, Li G, Wang Z, Dahlman JE, Malagon-Lopez J, Gujja S, Kauffman KJ, Sun L, Sun H, Zhang X, Aryal B, Canfran-Duque A, Liu R, Kusters P, Sehgal A, Jiao Y, Anderson DG, Gulcher J, Fernandez-Hernando C, Lutgens E, Schwartz MA, Pober JS, Chittenden TW, Tellides G, Simons M. Endothelial TGF-beta signalling drives vascular inflammation and atherosclerosis. Nat Metab. 2019;1:912-926. (IF: 0,5)
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21. Cordts K, Grzybowski R, Lezius S, Luneburg N, Atzler D, Neu A, Hornig S, Boger RH, Gerloff C, Magnus T, Thomalla G, Schwedhelm E, Grant PJ, Choe CU. Guanidino compound ratios are associated with stroke etiology, internal carotid artery stenosis and CHA2DS2-VASc score in three cross-sectional studies. J Neurol Sci. 2019;397:156-161. ***(IF: 2,651)***
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Maegdefessel L, Matic Perisic L, Hedin U, Soehnlein O, Zeiher A, Dimmeler S. Hematopoietic deficiency of the long non-coding RNA MALAT1 promotes atherosclerosis and plaque inflammation. Circulation. 2018 Nov; Epub. ***(IF: 23,054)***

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Adaptation and Glucose Metabolism by Producing the Omega-3 Lipid 12-HEPE from Brown Fat. Cell Metab. 2019. ***(IF: 22,415)***
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