

**PUBLICATION LIST of Collin Y. Ewald**

Summary: Total peer-reviewed publication: 22

**12 first authors, 7 original research, 7 invited reviews, 1 meeting report, 4 protocols, 11 (co-)corresponding**

**5 most important publication are marked in grey**

**1) Publications from my 4 years independent lab as SNF Professorship at ETHZ (last and/or corresponding author)**

Teuscher AC and **Ewald CY**. (2018). Overcoming Autofluorescence to Assess GFP Expression During Normal Physiology and Aging in *Caenorhabditis elegans*.

***Bio Protoc.*** 8(14). pii: e2940. doi: 10.21769/BioProtoc.2940. PMID: 30073182

**Ewald CY**. (2018). Redox Signaling of NADPH Oxidases Regulates Oxidative Stress Responses, Immunity and Aging.

***Antioxidants (Basel)***. 7(10). pii: E130. doi: 10.3390/antiox7100130. Review. PMID: 30274229

Bakula D, Aliper AM, Mamoshina P, Petr MA, Teklu A, Baur JA, Campisi J, **Ewald CY**, Georgievskaya A, Gladyshev VN, Kovalchuk O, Lamming DW, Luijsterburg MS, Martín-Montalvo A, Maudsley S, Mkrtychyan GV, Moskalev A, Olshansky SJ, Ozerov IV, Pickett A, Ristow M, Zhavoronkov A, Scheibye-Knudsen M. Aging and drug discovery. (Meeting Report)

***Aging (Albany NY)***. 2018 Nov 13;10(11):3079-3088. doi: 10.18632/aging.101646. PMID: 30425188

Teuscher AC, Statzer C, Pantasis S, Bordoli MR, **Ewald CY**. (2019). Assessing collagen deposition during aging in mammalian tissue and in *Caenorhabditis elegans*.

***Methods Mol Biol.*** 1944:169-188. doi: 10.1007/978-1-4939-9095-5\_13. PMID:30840243

Teuscher AC, Jongsma E, Davis MN, Statzer C, Gebauer JM, Naba A, **Ewald CY**. (2019). The *in-silico* characterization of the *Caenorhabditis elegans* matrisome and proposal of a novel collagen classification.

***Matrix Biol Plus.*** doi: 10.1016/j.mbps.2018.11.001

Social Media Responses:

@DrGTWU: <https://twitter.com/DrGTWU/status/1111509706386952193>

"Thank you, @CollinEwald, for this foundational work, and to @ewbank\_lab for sharing! My group will be increasing the citation index of this work! Dr. G added,"

@ishier\_raote: [https://twitter.com/ishier\\_raote/status/1111544341191901184](https://twitter.com/ishier_raote/status/1111544341191901184) "A very useful resource indeed!"

@CSwormlab: <https://twitter.com/NabaLabUIC/status/1111244387533709319> "Looking forward to using this resource! Congrats!"

@ewbank\_lab: [https://twitter.com/ewbank\\_lab/status/1111172814315372544](https://twitter.com/ewbank_lab/status/1111172814315372544)

"<http://www.sciencedirect.com/science/article/pii/S2590028518300012> ... Thorough classification of #C\_elegans #matrisome by

@CollinEwald et al; analysis of 181 #collagens. Will be very useful resource for those interested in ECM. A bonus: categorization of hits from our #RNAi screen for #immune genes"

Hess M, Gomariz A, Goksel O, **Ewald CY**. (2019). *In-vivo* quantitative image analysis of age-related morphological changes of *C. elegans* neurons reveals a correlation between neurite bending and novel neurite outgrowths

***eNeuro*** Jul 10;6(4). pii: doi: 10.1523/ENEURO.0014-19.2019. PMID:31217194

**Ewald CY**. (2019). The Matrisome during Aging and Longevity: A Systems-Level Approach toward Defining Matreotypes Promoting Healthy Aging.

***Gerontology.*** 2019 Dec 13:1-9. doi: 10.1159/000504295. PMID: 31838471

Interview with Ira Pastor, ideaXme longevity and aging Ambassador and Founder of Bioquark: Superhighway of Our Cells: Extracellular Matrix With Prof Collin Ewald

[https://youtu.be/j8\\_6iBP6hqM](https://youtu.be/j8_6iBP6hqM)

Statzer C and **Ewald CY** (2020). The extracellular matrix phenome across species.

***Matrix Biol. Plus,*** Jun 23; 100039, <https://doi.org/10.1016/j.mbps.2020.100039>

Haefke A and **Ewald CY** (2020). Tail Tendon Break Time for the Assessment of Aging and Longitudinal Healthspan in Mice

**Bio Protoc.** in press.

Venz R, Korosteleva A, Jongsma E, and **Ewald CY** (2020). Combining Auxin-Induced Degradation and RNAi Screening Identifies Novel Genes Involved in Lipid Bilayer Stress Sensing in *Caenorhabditis elegans*.

**G3: GENES, GENOMES, GENETICS** Early online September 21, <https://doi.org/10.1534/g3.120.401635>

**Preprint Server: Submitted to journal and currently in revision**

Nadia Vertti-Quintero, Simon Berger, Xavier Casadevall i Solvas, Cyril Statzer, Jillian Annis, Peter Ruppen, Stavros Stavrakis, **Collin Y Ewald\***, Rudiyanto Gunawan\*, Andrew deMello (2019).

Heterogeneity in heat shock response dynamics caused by translation fidelity decline and proteostasis collapse

**bioRxiv** 822072; doi: <https://doi.org/10.1101/822072> \*co-corresponding authors

Evan G Williams, Niklas Pfister, Suheeta Roy, Cyril Statzer, Jesse Ingels, Casey Bohl, Moaraj Hasan, Jelena Ćuklina, Peter Bühlmann, Nicola Zamboni, Lu Lu, **Collin Y Ewald**, Robert W Williams, Ruedi Aebersold

The Molecular Landscape of the Aging Mouse Liver

**bioRxiv** 222968; doi: <https://doi.org/10.1101/2020.08.20.222968>

**2) Publications with my postdoctoral mentor (Keith Blackwell, Harvard Medical School)**

*The \$ indicates that I am corresponding and \* indicates that I am co-corresponding author. The basis of these "(co-)corresponding author papers" were started as I was Junior Faculty at Joslin Diabetes Center and an Instructor in Medicine at Harvard Medical School in the lab of Prof. Keith Blackwell, M.D., Ph.D. and finished when I started my independent lab at ETH Zürich.*

**Ewald CY**, Castillo-Quan JI, Blackwell TK. (2018). Untangling Longevity, Dauer, and Healthspan in *Caenorhabditis elegans* Insulin/IGF-1-Signalling.

**Gerontology**. 64(1):96-104. doi: 10.1159/000480504. PMID: 28934747

**Ewald CY**<sup>\$</sup>, Hourihan JM, Blackwell TK. (2017). Oxidative Stress Assays (arsenite and tBHP) in *Caenorhabditis elegans*.

**Bio Protoc**. 7(13). pii: e2365. doi: 10.21769/BioProtoc.2365. PMID: 29445761

<sup>\$</sup>corresponding author

**Ewald CY**<sup>°\*</sup>, Hourihan JM<sup>°</sup>, Bland MS, Obieglo C, Katic I, Moronetti Mazzeo LE, Alcedo J, Blackwell TK<sup>\*</sup>, Hynes NE<sup>\*</sup>. (2017). NADPH oxidase-mediated redox signaling promotes oxidative stress resistance and longevity through *memo-1* in *C. elegans*.

**eLife**. 6. pii: e19493. doi: 10.7554/eLife.19493. PMID: 28085666

<sup>°</sup>co-first author and <sup>\*</sup>co-corresponding authors: [collin-ewald@ethz.ch](mailto:collin-ewald@ethz.ch)

Media attention: Longevity Reporter [[link](#)]

**Ewald CY**, Landis JN, Porter Abate J, Murphy CT, Blackwell TK. (2015). Dauer-independent insulin/IGF-1 signaling implicates collagen remodelling in longevity.

**Nature**. 519, 97–101. doi: 10.1038/nature14021

**This paper forms the basis of our current research program.**

Media attention: Joslin News release video [[link](#)], Science Daily [[link](#)], MedicalXpress [[link](#)],

The Scientist: Long Live Collagen [[link](#)], TV interview, 7vor7, TeleBasel, Switzerland [[link](#)]

Radio interview, SWR2 (Südwestrundfunk) German Public Radio [[link](#)]

Honoree mentioning from American Federation For Aging Research [[link](#)]

Blackwell TK, Steinbaugh MJ, Hourihan JM, **Ewald CY**, Isik M. (2015). SKN-1/Nrf, stress responses, and aging in *Caenorhabditis elegans*.

***Free Radic Biol Med.*** 88(Pt B):290-301. doi: 10.1016/j.freeradbiomed.2015.06.008. Review. PMID: 26232625

### **3) Publications with my PhD supervisor (Chris Li, City University of New York)**

**Ewald CY**, Marfil V, Li C. (2016). Alzheimer-related Protein APL-1 modulates lifespan through heterochronic gene regulation in *Caenorhabditis elegans*.

***Aging Cell.*** doi: 10.1111/ace.12509. PMID: 27557896

**Ewald, CY**, Cheng R, Tolen L, Shah V, Gillani A, Nasrin A, Li C. (2012). Pan-neuronal expression of APL-1, an APP-related protein, disrupts olfactory, gustatory and touch plasticity in *Caenorhabditis elegans*.

***J Neurosci.*** 32: 10156-69. doi: 10.1523/JNEUROSCI.0495-12.2012. PMID: 22836251,

**Ewald CY**, Raps DA, Li C. (2012). APL-1, the Alzheimer's Amyloid precursor protein in *Caenorhabditis elegans*, modulates multiple metabolic pathways throughout development.

***Genetics.*** 191: 493-507. doi: 10.1534/genetics. 112.138768. PMID: 22466039, PMCID: PMC3374313

Issue highlights: Genetics June 2012 191:NP [\[link\]](#)

Media attention: BBC news: Alzheimer's gene 'diabetes link'. 14 June 2012 [\[link\]](#), Wallstreet-online (Germany) [\[link\]](#)

**Ewald CY** and Li C. (2012). The secreted Alzheimer-related amyloid precursor protein fragment has an essential role in *C. elegans*.

***Prion.*** 6(5):433-6. doi: 10.4161/pri.22310. Epub 2012 Oct 8. PMID: 23044509

**Ewald CY** and Li C. (2012). *Caenorhabditis elegans* as a model organism to study APP function.

***Exp Brain Res.*** 217(3-4):397-411. doi: 10.1007/s00221-011-2905-7. Epub 2011 Oct 29. Review. PMID: 22038715

**Ewald CY** and Li C. (2010). Understanding the molecular basis of Alzheimer's disease using a *Caenorhabditis elegans* model system.

***Brain Struct Funct.*** 214(2-3):263-83. doi: 10.1007/s00429-009-0235-3. Review. PMID: 20012092

### **4) Doctoral Thesis**

02/2011 Doctoral Thesis: "Multifunctional roles of APL-1 in *C. elegans*" Thesis Adviser: Prof. Dr. Chris Li.