

LIST OF PUBLICATIONS | DR. OLIVER NEUBAUER

Original and review articles in international peer-reviewed journals

Neubauer O ^{✉1}, Sabapathy S, Desbrow B, Ashton K, Lazarus R, Wessner B, Peake JM, Cameron-Smith D, Wagner K-H, Haseler JL, Bulmer AC. Time-course dependent changes in the transcriptome of human skeletal muscle during recovery from endurance exercise: From inflammation to adaptive remodelling. (working title)
In preparation

Neubauer O [✉], Sabapathy S, Lazarus R, Jowett JBM, Desbrow B, Peake JM, Cameron-Smith D, Haseler JL, Wagner K-H, Bulmer AC. Transcriptome analysis of neutrophils after endurance exercise reveals novel signalling mechanisms in the immune response to physiological stress. *Journal of Applied Physiology* 114, 1677-1688, (IF² = 3.8, ranking 6/85, top 10%-journal in sport sciences, ranking 15/79 in the field of physiology)

Bisht K, Tampe J, **Neubauer O**, Wagner K-H, Wegiel B, Otterbein L, Bulmer AC. Biliverdin modulates the expression of C5aR and IL-1Ra in response to endotoxin.
In revision by the *Journal of Leukocyte Biology* (IF = 5, ranking 26/139, immunology)

Wagner K-H, Reichhold S, **Neubauer O** (2011). Impact of endurance and ultraendurance exercise on DNA damage. *Annals of the New York Academy of Sciences* 1229 (1): 115-123 (IF = 3.2, ranking 6/55, multidisciplinary sciences)

Wagner K-H, Reichhold S, Knasmüller S, Nics L, Meisel M, Hoelzl H, **Neubauer O** (2010). Well-trained, healthy triathletes experience no adverse health risks regarding oxidative stress and DNA damage by participating in an ultra-endurance event
Toxicology 278 (2): 211-216 (IF = 3.7, ranking 52/261, pharmacology and pharmacy)

Hoelzl C, Knasmüller S, Wagner K-H, Eslbling L, Huber W, Kager N, Ferk F, Ehrlich V, Nersesyan A, **Neubauer O**, Desmarchelier A, Marin-Kuan M, Delatour T, Verguet C, Bezenc-on C, Besson A, Grathwohl D, Simic T, Kundi M, Schilter B, Cavin C (2010). Instant coffee with high chlorogenic acid levels protects humans against oxidative damage of macromolecules. *Molecular Nutrition & Food Research* 54 (12), 1722-1733 (IF = 3.3, ranking 4/107, top 10%-journal in food science and technology)

Neubauer O [✉], Reichhold S, Nics L, Hoelzl C, Valentini J, Stadlmayr B, Knasmüller S, Wagner K-H (2010). Antioxidant responses to an acute bout of ultra-endurance exercise: Impact on DNA stability and indications for an increased need of nutritive antioxidants in the early recovery phase. *British Journal of Nutrition* 104 (8), 1129-1138 (IF = 3.4, ranking 11/66, nutrition and dietetics)

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² IF: the journal's impact factor in the year of publication according the *Journal Citation Reports of ISI Web of Knowledge* (further presented in parenthesis: ranking in the respective subject category)

- Reichhold S, **Neubauer O**, Hoelzl C, Stadlmayr B, Valentini J, Ferk F, Kundi M, Knasmüller S, Wagner K-H (2009). DNA damage in response to an Ironman Triathlon. *Free Radical Research* 43 (8): 753-760 (IF = 2.8, ranking 123/276, biochemistry and molecular biology)
- Reichhold S, **Neubauer O**, Bulmer AC, Knasmüller S, Wagner K-H (2009). Endurance exercise and DNA stability: Is there a link to duration and intensity? *Mutation Research – Reviews in Mutation Research* 682 (1): 28-38 (IF = 5.9, ranking 11/144, top 10%-journal in biotechnology and applied microbiology)
- Neubauer O** ✉, Reichhold S, Nersesyan A, König D, Wagner K-H (2008). Exercise-induced DNA damage: Is there a relationship with inflammatory responses? *Exercise Immunology Review* 14: 51-72 (IF = 3.4, ranking 3/71, top 10%-journal in sport sciences)
- Neubauer O**, König D, Kern N, Nics L, Wagner K-H (2008). No Indications of Persistent Oxidative Stress in Response to an Ironman Triathlon. *Medicine & Science in Sports & Exercise* 40 (12): 2119-2128 (IF = 3.4, ranking 4/71, top 10%-journal, sport sciences)
- Reichhold S, **Neubauer O**, Ehrlich V, Knasmüller S, Wagner K-H (2008). No acute and persistent DNA damage after an Ironman Triathlon. *Cancer Epidemiology Biomarkers & Prevention* 17: 1913-1919 (IF = 4.8, ranking 29/141, oncology)
- Neubauer O**, König D, Wagner K-H (2008). Recovery after an Ironman Triathlon: Sustained Inflammatory Responses and Muscular Stress. *European Journal of Applied Physiology* 104 (3): 417-426 (IF = 1.9, ranking 15/71, sport sciences)
- König D, **Neubauer O**, Nics L, Kern N, Berg A, Bisse E, Wagner K-H (2007). Biomarkers of exercise-induced myocardial stress in relation to inflammatory and oxidative stress. *Exercise Immunology Review* 13: 15-36 (IF = 3.4, ranking 3/71, top 10%-journal in sport sciences)

Presentations on scientific meetings (with abstracts)

- Neubauer O**, Sabapathy S, Peake J, Ashton KJ, Wessner B, Desbrow B., Lazarus R, Cameron-Smith D, Wagner K-H, Haseler L, Bulmer A. Time-course of transcriptomic responses in skeletal muscle during recovery from endurance exercise indicates prolonged muscular inflammation. Accepted for an oral presentation at the **11th Symposium of the International Society of Exercise and Immunology (ISEI)**, Sep. 9th – 12th 2013, Newcastle, Australia, abstract: Book of Abstracts
- Neubauer O**, Sabapathy S, Lazarus R, Desbrow B., Ashton KJ, Wessner B, Peake J, Cameron-Smith D, Wagner K-H, Haseler L, Bulmer A. Time-course of transcriptomic changes in skeletal muscle during recovery from endurance exercise. **2013 Congress of the European College of Sport Science**, June 26th – 29th 2013, Barcelona, Spain; oral presentation, abstract: Book of Abstracts

- Neubauer O.** Transcriptomic responses of circulating neutrophils and skeletal muscle during recovery from endurance exercise. **1st Scientific Meeting of the Research Platform “Active Ageing” – Cells meet Function, an integrative approach in Research on Ageing**, Apr. 9th 2013, University of Vienna, Austria; invited presentation, abstract: Book of Abstracts
- Neubauer O**, Sabapathy S, Lazarus R, Ashton KJ, Desbrow B, Cameron-Smith D, Haseler L, Wagner K-H, Bulmer AC (2012). Acute endurance exercise induces up-regulation of skeletal muscle genes involved in metabolism, mitochondrial biogenesis and insulin sensitivity. **Conference on Life Style, Oxidative Stress & Diabetes Mellitus**, Modra, Slovakia; Nov. 8th – 9th 2012, oral presentation, abstract: Book of Abstracts
- Neubauer O**, Sabapathy S, Lazarus R, Jowett J, Desbrow B, Cameron-Smith D, Haseler L, Wagner K-H, Bulmer A (2012). Counter-regulation of interleukin-1 receptor and Toll-like receptor signalling in neutrophils during recovery from muscle-damaging endurance exercise, **2012 Congress of the European College of Sport Science**, July 4th – 7th 2012, Bruges, Belgium; oral presentation, abstract: Book of Abstracts
- Isautier J, Bulmer A, Sabapathy S, Desbrow B, **Neubauer O** (2012). The influence of habitual antioxidant intake on the antioxidant response to a single bout of prolonged, intense exercise. **5th Exercise & Sports Science Australia Conference**, April 19th – 21st 2012, Gold Coast, Australia; oral presentation
- Isautier J, Bulmer A, Sabapathy S, Desbrow B, **Neubauer O** (2011). Habitual antioxidant consumption and the antioxidant responses to acute endurance exercise, **Gold Coast Health and Medical Research Conference**, Dec. 1st – 2nd 2012, Gold Coast, Australia; oral presentation, abstract: Book of Abstracts
- Neubauer O**, Sabapathy S, Isautier J, Desbrow B, Steward G, Bisht K, Ashton K, Wagner K-H, Haseler L, Bulmer A (2011). Skeletal muscle and blood neutrophil gene responses to endurance exercise. **Gold Coast Health and Medical Research Conference**, Dec. 1st – 2nd 2012, Gold Coast, Australia; poster presentation, abstract: Book of Abstracts
- Neubauer O**, Wagner KH. (2010). Antioxidants requirements and physical exercise. Invited presentation at the **Annual Meeting of the Austrian Society for Nutrition Research**, Nov. 29th 2010, Ministry of Health, Vienna, Austria; abstract: *Nutrition*, Dec. 2010.
- Neubauer O** (2010). Inflammatory and Oxidative Stress Responses to Ironman Triathlon Races and the Relevance of Antioxidants. Invited presentation at the **Centre of Excellence for Applied Sport Science Research, Queensland Academy of Sport, Brisbane**, Australia; Sep. 6th 2010; abstract: *QAS Research News*, Spring 2010
- Neubauer O**, Reichhold S, König D, Knasmüller S, Wagner K-H. Inflammatory, Oxidative Stress and Antioxidant Responses after Ultra-Endurance Exercise and their Relevance for DNA Stability (2009). **9th Symposium of the International Society of Exercise and Immunology (ISEI)**, Sep. 21st-23rd 2009, Tübingen, Germany, oral presentation, abstract: Book of Abstracts

- Neubauer O**, Reichhold S, König D, Knasmüller S, Wagner K-H (2009). Implications of Oxidative Stress, Antioxidant and Inflammatory Responses on DNA Stability after Ultra-Endurance Exercise, **Society for Free Radical Research (SFRR)-Europe Meeting**, Aug. 26th – 29th 2009, Rome, Italy; poster presentation, abstract: *Free Radical Res.* 43, S1: S92
- Neubauer O**, Reichhold S, König D, Knasmüller S, Wagner K-H (2009). Ultra-endurance exercise and DNA Stability: Role of Inflammatory and Antioxidant Responses, **2009 Congress of the European College of Sport Science**, June 24th – 27th 2009, Oslo, Norway; oral presentation, abstract: Book of Abstracts
- Neubauer O**, Reichhold S, König D, Knasmüller S, Wagner K-H (2009). Consequences of Inflammatory and Antioxidant Responses on DNA Damage after Ultra-endurance Exercise, **24th Meeting of the Gesellschaft für Umwelt- Mutationsforschung (GUM; German section of the European Environmental Mutagen Society)**, Feb. 17th – 20th 2009, University of Vienna, oral presentation, abstract: abstract booklet
- Neubauer O**, Reichhold S, Knasmüller S, König D, Wagner K-H (2009). Exercise and DNA Damage: Significance of Inflammatory and Antioxidant Responses, **2nd Copenhagen Workshop on DNA Oxidation**, Jan. 29th – 30th 2009, University of Copenhagen, Denmark; poster presentation
- Wagner K-H, Kern N, Nics L, Reichhold S, **Neubauer O** (2008). Oxidative Stress and Antioxidant Responses after an Ironman triathlon, **Society for Free Radical Research (SFRR) -Europe Meeting**, July 5th – 9th 2008, Berlin, Germany; abstract: *Free Radical Res.* 42(1) 2008: 38 S5-2
- Reichhold S, **Neubauer O**, Wagner K-H (2008). Effects of an Ironman Triathlon on the DNA as detected by the SCGE and CBMN Cyt assay, **2008 Congress of the European College of Sport Science**, July 9th – 12th 2008, Estoril, Portugal; poster presentation, abstract: Book of Abstracts
- Neubauer O**, König D, Wagner K-H (2008). Recovery Responses in Ironman Triathletes, **2008 Congress of the European College of Sport Science**, July 9th – 12th 2008, Estoril, Portugal; oral presentation, abstract: Book of Abstracts
- Reichhold S, **Neubauer O**, Wagner K-H (2008). Effects of an Ironman Triathlon on DNA Stability. **1st symposium of the Vienna Research Platform of Nutritional and Food Sciences**, Apr. 25th 2008, University of Vienna, Austria; poster presentation, abstract: *Annals of Nutrition and Metabolism* 52 (2008):131
- Neubauer O**, König D, Reichhold S, Wagner K-H (2008). Recovery Responses in Ironman Triathletes. **1st symposium of the Vienna Research Platform of Nutritional and Food Sciences**, Apr. 25th 2008, University of Vienna, Austria; poster presentation
- Neubauer O**, Kern N, Nics L, Reichhold S, Wagner K-H (2008). Enhanced Antioxidant Capacity after an Ironman Triathlon. **1st symposium of the Vienna Research Platform of Nutritional and Food Sciences**, Apr. 25th 2008, University of Vienna, Austria; poster presentation, abstract: *Annals of Nutrition and Metabolism* 52 (2008):130

Reichhold S, **Neubauer O**, Ehrlich V, Hölzl C, Knasmüller S, Wagner K-H (2008). DNA responses after an Ironman triathlon. **International conference Oxidative stress in Diseases**, Apr. 23rd 2008, Bratislava, Slovakia; oral presentation, abstract: Book of Abstract

Neubauer O, Kern N, Nics L, Reichhold S, Wagner K-H (2008). Oxidative stress and antioxidant responses after an Ironman triathlon. **International conference Oxidative stress in diseases**, Apr. 24th 2008, Bratislava, Slovakia; oral presentation, abstract: Book of Abstracts

Reichhold S, Meisel M, **Neubauer O**, Wagner K-H (2007). Influence of an Ironman triathlon on Sister Chromatid Exchanges and High Frequency Cells. **13th Scientific Symposium of the Austrian Pharmacological Society**, Nov. 22nd – 24th 2007, Vienna, Austria

Reichhold S, Meisel M, **Neubauer O**, Wagner K-H (2007). Influence of an Ironman Triathlon on Sister Chromatid Exchanges and High Frequency Cells, **3rd International Symposium of the Human Nutrition & Metabolism Research & Training Center**, Oct. 15th – 18th 2007, Graz, Austria; poster presentation, abstract: Congress proceedings

Reichhold S, **Neubauer O**, Wagner K-H (2007). Does an Ironman Triathlon induce DNA damage? **2007 Congress of the European College of Sport Science**, July 11th – 14th 2007, Jyväskylä, Finland; poster presentation, abstract: Book of Abstracts

Neubauer O, Kern N, Nics L, Wagner K-H (2007). How Ironman Triathletes Balance Oxidative Stress. **2007 Congress of the European College of Sport Science**, July 11th – 14th 2007, Jyväskylä, Finland; oral presentation, abstract: Book of Abstracts

Book chapters

Neubauer O, Yfanti C. Antioxidants in Athlete's Basic Nutrition – Considerations towards a Guideline for the Intake of Vitamin C and Vitamin E. Book chapter for a book project on **Antioxidants in Sports Nutrition**, edited by M Lamprecht, under contract with CRC Press - Taylor and Francis, LLC. *In preparation*

Articles in popular-scientific journals

Neubauer O (2013). Sind Freie Radikal. **Triathlon Training**³, in print (about novel findings on antioxidants during exercise training)

Neubauer O, Reichhold S, Wagner K-H (2008). Biochemische, physiologische und molekularbiologische Stressreaktionen nach einem Ironman-Triathlon. **Ernährung aktuell** 3:1-4 (brief summary on the main findings of the *Austrian Science Fund*-funded research project)

³ *Triathlon* and *Triathlon Training* (published by spomedis GmbH, Hamburg, Germany) are Europe's largest triathlon magazines

- Neubauer O** (2008). Wettlauf der Kohlenhydrate. *Triathlon Training* 6:86-89 (about the specific effects of different carbohydrate types in race nutrition)
- Neubauer O** (2007). Eiserner Widerstand. *Triathlon Training* 4:59-61 (first general study results regarding certain stress responses after an Ironman race and regulatory mechanisms)
- Neubauer O** (2006). Eisenmänner als 'Modelle' für Stressresistenz. *Triathlon Sonderausgabe Ironman Austria*:38 (a general introduction of the *Austrian Science Fund*-funded research project "Risk Assessment of Participants of an Ironman Triathlon")
- Neubauer O** (2006). Kohlenhydrate—Die Energiespezialisten. *Triathlon* 44:98-99 (an update on the guidelines for the carbohydrate intake for endurance athletes)
- Neubauer O** (2006). Fette—Treibstoff für die Langzeitausdauer. *Triathlon* 45:98-99 (on the importance of the adequate quantity and quality of lipids for endurance athletes)
- Neubauer O** (2006). Zur Hölle mit den Freien Radikalen. *Triathlon* 43:82-83 (on reactive oxygen species, oxidative stress and antioxidants in the context with exercise)
- Neubauer O** (2005). Regenerationsspezialisten—Aminosäuren sind mehr als Eiweißbausteine. *Triathlon* 39:56-58 (about the relevance of certain amino acids for recovery)
- Neubauer O** (2005). Der Wachmacher—Reizstoff Koffein. *Triathlon* 38:54-56 (on the physiological, metabolic and performance-enhancing effects of caffeine)
- Neubauer O** (2005). Erfolg geht durch den Magen. *Triathlon* 37:54-58 (about nutritional aspects before, during and after triathlon races)

Selected presentations and invited lectures to the public

- Neubauer O**, Sabapathy S, Lazarus R, Jowett J, Desbrow B, Cameron-Smith D, Haseler L, Wagner K-H, Bulmer AC (2012): Global gene responses of neutrophils following muscle-damaging endurance exercise. 3rd annual retreat of the Emerging Field Research Group / Active Aging Research Platform of K-H Wagner, Aug 29th 2012, Department of Nutritional Sciences, University of Vienna, Austria
- Neubauer O**, Sabapathy S, Lazarus R, Ashton K, Desbrow B, Jowett J, Cameron-Smith D, Haseler L, Wagner K-H, Bulmer A (2012). Skeletal muscle and blood neutrophil gene responses to endurance exercise. *Griffith Health Institute Seminar Series*, May 8th 2012, Griffith University, Gold Coast Campus, Australia; oral presentation
- Neubauer O** (2010). Relevance of training status and antioxidants on stress responses to an Ironman triathlon. Guest lecture for the students' course *Advances in Nutrition Research*, Nov. 11th 2010, Department of Nutritional Sciences, University of Vienna, Austria

Neubauer O (2010). Ernährung im Triathlon. Lecture for the training course for National Certified Triathlon Instructors (Sports Academy Innsbruck) on the topic nutrition in triathlon, April 29th 2010, Institute for Sport Sciences, University of Vienna

Wagner K-H, **Neubauer O** (2008). Einblicke in die Stressbewältigungsmechanismen von Ultra-Ausdauerathleten. Public relation event of the *Austrian Science Fund* AM PULS, June 8th 2008, Haus der Forschung, Vienna

Neubauer O, Reichhold S, Wagner K-H (2007). Wie übersteht der Körper der Körper einen Ironman-Triathlon? Einblicke in die Stressbewältigungsmechanismen von Ausdauersportlern. Lecture on "how Ironman triathletes balance the exercise-induced stress responses"; *University Meets Public*, Nov. 11th 2007, Volkshochschule Landstraße, Vienna, Austria

Neubauer O, Reichhold S, Wagner K-H (2007): Wie übersteht der Körper der Körper einen Ironman-Triathlon? Einblicke in die Stressbewältigungsmechanismen von Ultra-Ausdauersportlern. Information event for the participants of the Austrian Science Fund-funded 'Ironman study', Department of Nutritional Sciences, University of Vienna, Oct. 25th 2007, and Universitätslandessportzentrum Salzburg, Nov. 15th 2007

Wagner K-H, Reichhold S, **Neubauer O** (2007). How Ironman Triathletes Balance Oxidative Stress and Genomic Response. University of Kiel, Department of Human Nutrition and Food Science. Oct. 22nd 2007, Kiel, Germany; oral lecture

Neubauer O (2006). Basisernährung, Wettkampfernährung und Supplemente im Triathlon. Lectures on nutrition, race nutrition and supplementation in triathlon; Triathlon-Workshop, Nov. 12th – 13th 2006, Gesundheitszentrum Bad Sauerbrunn, Austria

Selected press releases

Alter in Bewegung – *Research Newsletter of the University of Vienna*, Juni 2011 (about the Research Platform Active Aging, coordinated by K-H Wagner, in which **O Neubauer** is involved)

[http://forschungsnewsletter.univie.ac.at/index.php?id=106858&tx_ttnews\[backPid\]=106858&tx_ttnews\[tt_news\]=28059&cHash=057538d3eec8a4c66a4c3fe1c14bdd83](http://forschungsnewsletter.univie.ac.at/index.php?id=106858&tx_ttnews[backPid]=106858&tx_ttnews[tt_news]=28059&cHash=057538d3eec8a4c66a4c3fe1c14bdd83)

Harte Kerle bei guter Gesundheit – Österreichische Studie: Ironman-Triathlon ist nicht gesundheitsgefährdend – press release by SpringerMedizin.at, Dec. 7th 2010 (about the Austrian Science Fund-funded 'Ironman study' undertaken by **O Neubauer** and K-H Wagner)

<http://www.springermedizin.at/artikel/19900-harte-kerle-bei-guter-gesundheit>

Bei Ironman-Wettbewerben zählt der Trainingsstatus – press release in *Kleine Zeitung*, Nov. 30th 2010 (about the Austrian Science Fund-funded 'Ironman study' undertaken by **O Neubauer** and K-H Wagner)

<http://www.kleinezeitung.at/freizeit/aktivwellness/2577696/bei-ironman-wettbewerben-zaehlt-trainingsstatus.story>

Ironman-Triathlon ist nicht gesundheitsgefährdend – *Research Newsletter of the University of Vienna*, Nov. 30th 2010 (about the Austrian Science Fund-funded 'Ironman study' undertaken by **O. Neubauer** and K-H Wagner)

<http://www.dieuniversitaet-online.at/beitraege/news/ironman-triathlon-ist-nicht-gesundheitsgefaehrdend/543.html>

Ironman-Triathlon ist nicht gesundheitsgefährdend – press release by *Informationsdienst Wissenschaft (idw)*, Nov. 30th 2010 (about the Austrian Science Fund-funded 'Ironman study' undertaken by **O. Neubauer** and K-H Wagner)

<http://idw-online.de/de/news399486>

Triathlon gefährdet nicht die Gesundheit – press release in *Der Standard*, Nov., 30th 2010 (about the Austrian Science Fund-funded 'Ironman study' undertaken by **O. Neubauer** and K-H Wagner)

<http://derstandard.at/1289609088449/Ironman-Triathlon-gefaehrdet-nicht-die-Gesundheit>

Extremer Leistungssport – Fitnesstest für DNA, press release by the *Austrian Science Fund*, Aug. 20th 2008 (about the Austrian Science Fund-funded 'Ironman study' undertaken by **O. Neubauer** and K-H Wagner)

http://www.fwf.ac.at/de/public_relations/press/pv200808-2de.html

Startpunkt Ziellinie, presentation of the Austrian Science Fund-funded 'Ironman study' undertaken by **O. Neubauer** and K-H Wagner in the *Annual Report ('Jahresbericht') 2006 of the Austrian Science Fund* (page 55)

http://www.fwf.ac.at/de/public_relations/publikationen/jahresberichte/fwf-jahresbericht-2006.pdf