

*Péter Nagy*  
*Curriculum Vitae as of Jan 29, 2018*

## Contact

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## Positions Held

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2017- Scientific Director at the National Institute of Oncology, Hungary  
2013- Director of International Relations at the National Institute of Oncology, Hungary  
2011- Head of the Department of Molecular Immunology and Toxicology at the National Institute of Oncology, Hungary  
2015- Honorary Associate Professor at Debrecen University, Hungary  
2015- Honorary Senior Research Fellow at the University of Otago, Christchurch, Department of Pathology, Free Radical Research Group, New Zealand  
2011-2014 Honorary Research Fellow at the University of Otago, Christchurch, Department of Pathology, Free Radical Research Group, New Zealand  
2012- 2013 Deputy Director of International Relations at the National Institute of Oncology, Hungary  
2010- 2011 Research Fellow at the University of Otago, Christchurch, Department of Pathology, Free Radical Research Group, New Zealand  
2010 Invited Visiting Research Fellow at the University of Washington, Department of Medicine Division of Metabolism, Endocrinology and Nutrition, Seattle, USA  
2008 - 2009 Visiting Research Fellow at the Swiss Federal Institute of Technology (ETH), Department of Chemistry, Zurich, Switzerland  
2007 - 2009 Postdoctoral Fellow at the University of Otago, Christchurch, Department of Pathology, Free Radical Research Group, New Zealand  
2004 - 2007 Postdoctoral Fellow at the University of Oklahoma, Department of Chemistry and Biochemistry, USA

## Academic Achievements

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2017 Doctor of Science of the Hungarian Academy of Sciences  
2012 Habilitation at Debrecen University  
2004 June Ph.D. graduation at The Royal Institute of Technology (KTH), Stockholm, Sweden  
2004 April Ph.D. graduation at Debrecen University (DU), Debrecen, Hungary  
2003 Certificate in Environmental Monitoring (TUV Akademie, Germany)  
2000 Master of Science in Chemistry, Debrecen University

## Representative roles for NIO in EU Projects

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2016- Institutional coordinator in the Joint Actions on Rare Cancers  
2016- Institutional contact person in the European Reference Network Scheme for Rare Diseases.  
2016- Accreditation and Designation Board member of the Organisation of European Cancer Institutes (OECI)  
2015- Accreditation Auditor for OECI  
2013- WP5 Leader (Benchmark tools piloting) in the BenchCan project (Benchmarking Comprehensive Cancer Care and Cancer Care Pathways in Europe)  
2012- Coordinator in the EurocanPlatform project (Structuring Translational Cancer Research in Europe)  
2012- Participant and coordinator in the Transcan project (ERA-NET research grant mechanism for translational cancer research)

## Honors

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### Member in Editorial Boards

- 2016- *Review Editor: British Journal of Pharmacology*  
2011- *Member of the Associate Editorial Board: International Journal of Biochemistry and Molecular Biology*  
2017- *Editor: Onkológia & Hematológia*

### Current Grant Supports

- 2017-2019 National Research, Development and Innovation Fund  
Role: Principal Investigator  
2016-2018 NIH R21  
Role: Co- Investigator  
2013-2017 Hungarian National Science Foundation  
Role: Principal Investigator  
2013-2017 Marsden Grant New Zealand  
Role: Co-Investigator

### Important Invited or Contributed Lectures

- 2018 *Invited Speaker at the 4th meeting of the study group for redox biology of the German Society for Molecular Biology and Biochemistry, Berlin, Germany*  
2018 *Invited Speaker at the Nitric Oxide Society meeting, Oxford, England*  
2018 *Invited speaker at the Thiol-Based Redox Regulation and Signaling (Gordon Research Conference), Spain*  
2018 REACTIVE SULFUR SPECIES Mechanistic considerations for their regulatory functions in Redox Biology  
*Invited Speaker and session chair/organizer of the Redox Biology section at the 2018 FEBS conference, Prague, Cech Republic*  
2018 *Invited Speaker and session chair/organizer at the 2018 SFRRRI, Lisboa, Portugal*  
2018 *Invited Speaker and chair at the 5th World Congress on Hydrogen Sulfide in Biology and Medicine, Toronto, Canada, May31-June3*  
2017 Dynamic redox cycling of hydrogen sulfide and polysulfide species could represent an important regulatory element in sulfur biology  
*Invited Speaker organizer of the Plant and Human Sulfur Biology Conference 2017, Balatonfüred, Hungary*  
2017 Roles of the thioredoxin and glutathione systems in reduction of inorganic- and Cys-polysulfide spec  
*Invited Speaker at the SE2017: The 11th Intenational Symposium on Selenium in Biology and Medicine and The 5th International Conference on Selenium in the inveronment and Human health, Stockholm, Sweden*  
2017 Hydrogen Sulfide Signaling  
*Invited Lecture at the Redox regulation, oxidative stress and selenoproteins - Summer Graduate Course, Karolinksa Instiutet, Stockholm, Sweden*  
2017 Molecular models of hydrogen sulfide-mediated protection against oxidative stress  
*Invited Speaker at 90th Annual Meeting of Japanese Society for Bacteriology, Sendai, Japan*  
2016 Some aspects of sulfur biology from a mechanistic chemist's perspective  
*Invited Seminar at the Center for Molecular Medicine Cologne University Koeln, Germany*  
2016 Chemical aspects of sulfane sulfur biology  
*Invited Speaker at the Tohoku University Graduate School of Medicine, Sendai, Japan*  
2016 Advances and challenges in the field of H<sub>2</sub>S biology  
*Invited Speaker at the Dojindo Inc. HQs in Kumamoto, Japan*  
2016 Bio-chemical aspects of thiol oxidation  
*Invited Seminar Kyoto University, Kyoto, Japan*  
2016 Molecular pathways in persulfide biology  
*Invited Speaker at the 9th International Conference on the Biology, Chemistry, and Therapeutic Applications of Nitric Oxide held jointly with the 16th Annual Scientific Meeting of the Nitric Oxide Society of Japan, Sendai, Japan*  
2016 Hydrogen sulfide, the new kid on the block in redox signaling  
*Invited Speaker at the Society for Free Radical Research-Europe, Budapest, Hungary*

- 2016 Insights into the molecular pathways of persulfide-mediated redox signaling  
*Invited Speaker at the 4th International Conference on the Biology of Hydrogen Sulfide, Napoli, Italy*
- 2015 Protein persulfides: Insights into the molecular mechanisms of H<sub>2</sub>S signaling  
*Invited plenary lecture at the Joint Meeting of the Societies for Free Radical Research Australasia and Japan, Christchurch, New- Zealand*
- 2015 Mechanistic chemical perspective of thiol redox biology  
*Invited Speaker at the Thiol-based redox switches in life sciences ESF-EMBO conference, Sant Feliu de Guixols, Spain*
- 2015 Superoxide-mediated post-translational modification of tyrosine residues  
*Invited Speaker at the Society for Free Radical Research- Europe meeting Stuttgart, Germany*
- 2015 Hydrogen sulfide and redox signaling  
*Invited Speaker at the "Redox Regulation, Oxidative Stress, and Selenoproteins." Medical University of South Carolina in Charleston, S.C.*
- 2015 Mechanistic Chemical Perspective of Hydrogen Sulfide Signaling  
*Invited Speaker at the 3rd European Conference on the Biology of Hydrogen Sulfid, Athens, Greece*
- 2015 Mechanistic Chemical Perspective of Hydrogen Sulfide Signaling  
*Invited Speaker at the „RISE Enhancing Biomedical Sciences and Biomedical Engineering in Science and Technology” Mayagüez, Puerto Rico*
- 2015 Redox biochemistry of thiol proteins and hydrogen sulfide  
*Invited Seminar LSU Health Shreveport, USA,*
- 2014 Mechanistic consideration of sulfide- versus polysulfide-mediated signaling events from a chemist's perspective  
*Invited Speaker at the Third International Conference on the Biology of Hydrogen Sulfide and COST meeting, Kyoto, Japan*
- 2014 Tools and techniques for gasotransmitters detection; working with gasotransmitters  
Chemical aspects of gasotransmitter signaling  
*Invited Trainer at the Training School on Gasotransmitters Biology and Chemistry, Capri, Italy*
- 2014 Kinetics and mechanisms of thiol redox reactions in relation to their biological functions  
*Invited Talk at the Redox Biology Seminars, Heidelberg DKFZ, Germany*
- 2013 Redox Proteomics at the National Institute of Oncology;  
Molecular mechanisms of BRAF V600E inhibition and acquired resistance to inhibitors of the MAPK pathway in melanoma malignum. Potential roles of Redox Regulation.  
*2 Invited lecture at the Hungarian Oncologists' Society's Annual Scientific Chemotherapy Congress*
- 2013 Kinetics and mechanisms of thiol oxidation in biological systems  
*Lecture at the Debrecen Colloquium on Inorganic Reaction Mechanisms 2013 Conference, Debrecen, Hungary*
- 2013 Scavenging of doxorubicin-induced peroxide species by peroxiredoxin 2 in red blood cells  
*Lecture at the Eu-ROS COST meeting, Budapest, Hungary*
- 2013 Chemical aspects of hydrogen sulfide measurements in physiological samples  
*Invited lecture at the European Network on Gasotransmitters COST meeting, Athens, Greece*
- 2012 Kinetics and Mechanisms of Thiol Oxidation in Biological Systems  
*Invited plenary lecture at the Natural Products and Related Redox Catalysts: Basic Research and Application in Medicine and Agriculture, Aveiro, Portugal*
- 2012 Some Redox- and Coordination-Chemical Properties of Hydrogen Sulfide in Relation to its Biological Activities  
*Invited lecture at the European Network on Gasotransmitters COST meeting, Budapest, Hungary*
- 2012 Redox Chemical Studies of Biological Thiols  
*Invited seminar at Saarbrücken University, Saarbrücken, Germany*
- 2012 Interactions of Hydrogen Sulfide with Neutrophil-Derived Oxidants  
*Invited lecture at the First European Conference on the Biology of Hydrogen Sulfide, Smolnice, Slovak Republic*
- 2012 Reactive Oxygen Species in Cancer Research  
*Invited lecture at the Hungarian Oncologists' Society's Annual Scientific Chemotherapy Congress*
- 2011 Novel Mechanisms for Superoxide Toxicity  
*Invited seminar at Debrecen University, Department of Inorganic and Analytical Chemistry Debrecen*

- 2010 Mechanistic Investigation of the High Reactivity and Specificity of Peroxiredoxins with Peroxides *Invited speaker at the 19<sup>th</sup> Annual Meeting of the Society for Free Radical Research Australasia, Akaroa, New Zealand*
- 2010 Chemical Aspects of Thiol Oxidation in Biology  
*Invited seminar at the Puget Sound Blood Center, Seattle, WA, USA*
- 2010 The Jekyll and Hide Roles of Superoxide in vivo: Mechanistic Investigation of Superoxide Mediated Tyrosine Modifications on Peptides and Proteins  
*Invited seminar at the University of Washington, Department of Medicine, Seattle, WA, USA*
- 2010 Addition of superoxide to tyrosyl radicals in peptides and proteins; a potential route for superoxide toxicity  
*Selected speaker at the Oxygen Radicals Gordon Research Conference, Ventura, CA, USA*
- 2009 Rapid reaction of superoxide with insulin-tyrosyl radical results in hydroperoxide formation, a kinetic study.  
*Selected speaker at the 5<sup>th</sup> Joint Meeting of the Society for Free Radical Research (Australia and Japan) with Mutagenesis and Experimental Pathology Society of Australia, Sydney, Australia*
- 2009 Neutrophil mediated oxidation of opioid peptides  
*Invited speaker at the Brain Health & Repair Research Centre Conference, Dunedin, New Zealand*
- 2009 Mechanisms of thiol oxidation in biology. A chemist's perspective  
*Invited seminar at the University of Otago, Dunedin, Department of Chemistry, New Zealand*
- 2009 Redox chemistry of neutrophil-derived oxidants  
*Invited seminar at the University of Otago, Dunedin, Department of Chemistry, New Zealand*
- 2009 Superoxide mediated radical reactions of opioid peptides and proteins  
*Invited seminar at the University of Otago, Dunedin, Department of Chemistry, New Zealand*
- 2008 Radical targets for superoxide toxicity  
*Invited seminar at The Swiss Federal Institute of Technology (ETH), Department of Chemistry, Zurich*
- 2007 Neutrophils, our in vivo cleaning staff, use chlorine bleach to disinfect  
*Invited seminar at Debrecen University, Department of Inorganic and Analytical Chemistry Debrecen*
- 2007 Thiocyanate is an Efficient Endogenous Scavenger of the Putative Eosinophilic Killing Agent Hypobromous Acid  
*Invited speaker at the 5<sup>th</sup> International Meeting on Human Peroxidases, Akaroa, New Zealand*
- 2005 Reactive Sulfur Species: Kinetics and Mechanisms of the Oxidation of Cystine Derivatives by Hypochlorous Acid  
*Invited speaker at the 57<sup>th</sup> Southeast/61<sup>st</sup> Southwest Joint Regional Meeting of the American Chemical Society, Memphis, Tennessee, USA*

### Awards

- 2015 János Bolyai Research Scholar of the Hungarian Academy of Sciences
- 2011-2015 Marie Curie International Reintegration Grant Fellow
- 2011 ESF-EMBO Young Investigator Travel Award to the "Glutathione and Related Thiols in Living Cells ESF-EMBO symposium".
- 2006 Young Investigator Travel Award to the "5<sup>th</sup> International Meeting on Human Peroxidases"
- 2001 Knut and Alice Wallenberg's Foundation Award
- 1999 Second place at the XXIV. National Science Competition for Undergraduate Students, Hungary
- 1993 Finalist of the National Chemistry Competition for high school students, Hungary

### Scholarships

- 2003 Ph.D. scholarship at The Royal Institute of Technology (KTH), Stockholm, Sweden
- 2001 Exchange Ph.D. student at KTH for 1 semester (Socrates Erasmus scholarship)
- 1999 - 2000 Exchange undergraduate student at KTH for 2 semesters (Socrates Erasmus scholarship)
- 1998 Exchange undergraduate student at KTH for 1 semester (Grant for talented young scientists, sponsored by Schering Plough pharmaceutical company)

### Foreign Languages

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- Hungarian:* Native language
- English:* Fluent, state proficiency exam, special certificate in chemistry
- Swedish:* Conversational level (Elementary and Advanced Beginners courses and certificates at KTH)
- German:* Conversational level (Elementary course and certificate at DU)

## International Leaderships

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- 2018 Chair and organizer of the Redox Biology section at the 2018 FEBS conference
- 2018 Member of the International Advisory Board at the 5th World Congress on Hydrogen Sulfide in Biology and Medicine
- 2017 Member of the Scientific Advisory Board and local organizer at the Plant and Human Sulfur Biology Conference,
- 2017 Co-Chair and organizer of the „Kékgolyó napok” seminar series
- 2016 Member of the International Scientific Committee of the 9th International Conference on the Biology, Chemistry, and Therapeutic Applications of Nitric Oxide held jointly with the 16th Annual Scientific Meeting of the Nitric Oxide Society of Japan
- 2016 Member of the International Advisory Board at the 4th International Conference on the Biology of Hydrogen Sulfide
- 2016 Member of the International Scientific Committee of the Society for Free Radical Research-Europe
- 2015 Member of the Scientific Organizing Committee of the XXXI. National Meeting of Hungarian Oncologists
- 2013 2nd European Conference on the Biology of Hydrogen Sulfide, Chair and advisor of the ”Cancer and Therapeutic potential of H<sub>2</sub>S manipulation” section

## Society Memberships

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- 2017- Society of Hungarian Oncologists’ Secretary-General
- 2012 - European Network on Gasotransmitters BM-1005 COST Management committee
- 2013 - EU-ROS BM-1203 COST Management committee substitute
- 2012- Society of Hungarian Young Oncologists
- 2011- Society of Hungarian Oncologists’
- 2008 - Society for Free Radical Biology and Medicine, USA
- 2007 - Society for Free Radical Research, Australia
- 2007 - 2008 Society for Biochemistry and Molecular Biology, New Zealand
- 2006 - 2007 American Association for the Advancement of Science
- 2005 - American Chemical Society
- 2001 - Alumni for Europe

## Research Accomplishments

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\*Corresponding author

### Book Chapters

6. Dorottya Garai, Zoltán Pálinkás, József Balla, Anthony J. Kettle, **Péter Nagy**  
*Measurements for sulfide-mediated inhibition of myeloperoxidase activity*  
**Methods Mol Biol.** Beltowski J, editor Springer, in press; 2017.
5. Doka E, Arner ESJ, Schmidt EE, **Nagy P.**  
*ProPerDP, a Protein Persulfide Detection Protocol*  
**Methods Mol Biol.** Beltowski J, editor Springer, in press; 2017.
4. Christopher Kevil, Miriam M. Cortese-Krott, **Péter Nagy**, Martin Feelisch, Csaba Szabo  
*Cooperative interactions between NO and H<sub>2</sub>S: chemistry, biology, physiology, pathophysiology*  
**Nitric Oxide Biology and Pathobiology** 3<sup>rd</sup> Edition Ignarro L.J., Ed. Elsevier: (2017) 57-83 Invited chapter.
3. **Péter Nagy\***  
*Mechanistic Chemical Perspective of Hydrogen Sulfide Signaling*  
**Methods in Enzymology**, Hydrogen Sulfide in Redox Biology Part A & B (2015) 554, 3-29. Invited chapter. [PubMed Link](#)

2. **Péter Nagy\*** and Christine C. Winterbourn  
*Redox chemistry of biological thiols*  
**Advances in Molecular Toxicology**, Fishbein, J.C., Ed. Elsevier: Amsterdam, The Netherlands, (2010), Vol. 4, pp. 183-222. Invited review.
1. **Péter Nagy**; Julie D. Becker; Rachael C. Mallo and Michael T. Ashby  
*The Jekyll and Hyde Roles of Cysteine Derivatives During Oxidative Stress*  
**New Biocides Development: The Combined Approach of Chemistry and Microbiology**, Zhu, P., Ed. ACS Press: Washington, D.C., (2007), pp. 193-212.

## Peer Reviewed Research Articles

50. Dorottya Garai, Bessie B. Ríos-González, Paul G. Furtmüller, Jon M. Fukuto, Ming Xian, Juan López-Garriga, Christian C. Obinger, **Péter Nagy\***  
*Mechanisms of myeloperoxidase catalyzed oxidation of H<sub>2</sub>S by H<sub>2</sub>O<sub>2</sub> or O<sub>2</sub> to produce potent protein Cys-polysulfide-inducing species*  
**Free Radical Biology and Medicine** (2017) 113, 551–563. [PubMed Link](#)
49. Takaaki Akaike, Tomoaki Ida, Fan-Yan Wei, Motohiro Nishida, Yoshito Kumagai, Md. Morshedul Alam, Hideshi Ihara, Tomohiro Sawa, Tetsuro Matsunaga, Shingo Kasamatsu, Akiyuki Nishimura, Masanobu Morita, Kazuhito Tomizawa, Akira Nishimura, Satoshi Watanabe, Kenji Inaba, Hiroshi Shima, Nobuhiro Tanuma, Minkyung Jung, Shigemoto Fujii, Yasuo Watanabe, Masaki Ohmuraya, **Péter Nagy**, Martin Feelisch, Jon M. Fukuto & Hozumi Motohashi  
*Cysteinyl-tRNA synthetase governs cysteine polysulfidation and mitochondrial bioenergetics*  
**Nature Communications** (2017) 8(1), 1177 [PubMed Link](#)
48. David E. Heppner, Milena Hristova, Tomoaki Ida, Ana Mijuskovic, Christopher M. Dustin, Virág Bogdándi, Jon M. Fukuto, Tobias P. Dick, **Péter Nagy**, Jianing Li, Takaaki Akaike, Albert van der Vliet  
*Cysteine perthiosulfenic acid (Cys-SSOH): A novel intermediate in thiol-based redox signaling?*  
**Redox Biology** (2018) 14, 379-385. [PubMed Link](#)
47. Gábor Rubovszky, Barna Budai, Erna Ganofszky, Zsolt Horváth, Éva Juhos, Balázs Madaras, Tünde Nagy, Eszter Szabó, Tamás Pintér, Erika Tóth, **Péter Nagy**, István Láng, Erika Hitre  
*Predictive Value of Early Skin Rash in Cetuximab-Based Therapy of Advanced Biliary Tract Cancer*  
**Pathology & Oncology Research** (2017) epub, ahead of print [PubMed Link](#)
46. Miriam Margherita Cortese-Krott, Anne Koning, Gunter Georg Kuhnle, **Peter Nagy**, Christopher Bianco, Andreas Pasch, David A Wink, Jon Fukuto, Alan A Jackson, Harry van Goor, Kenneth R Olson, Martin Feelisch  
*The Reactive Species Interactome: Evolutionary Emergence, Biological Significance, and Opportunities for Redox Metabolomics and Personalized Medicine*  
**Antioxidants and Redox Signaling** (2017) 27(10), 684-712. [PubMed Link](#)
45. László Potor, **Péter Nagy**, Gábor Méhes, Zoltán Hendrik, Viktória Jeney, Dávid Pethő, Anita Vasas, Zoltán Pálinkás, Enikő Balogh, Ágnes Gyetvai, Matthew Whiteman, Roberta Torregrossa, Mark E. Wood, Sándor Olvasztó, Péter Nagy, György Balla, József Balla  
*Hydrogen Sulfide Abrogates Hemoglobin-Lipid Interaction In Atherosclerotic Lesion*  
**Oxidative Medicine and Cellular Longevity** (2018) Volume 2018 [Doi](#)
44. Bartosz Szczesny, Michela Marcatti, John R. Zatarain, Nadiya Druzhyna, John E. Wiktorowicz, **Péter Nagy**, Mark R. Hellmich & Csaba Szabo  
*Inhibition of hydrogen sulfide biosynthesis sensitizes lung adenocarcinoma to chemotherapeutic drugs by inhibiting mitochondrial DNA repair and suppressing cellular bioenergetics*  
**Scientific Reports** (2016) 6, 36125. [PubMed Link](#)
43. Gábor Sirokmány, Anna Pató, Melinda Zana, Ágnes Donkó, Adrienn Bíró, **Péter Nagy**, Miklós Geiszt  
*Epidermal growth factor-induced hydrogen peroxide production is mediated by dual oxidase 1*  
**Free Radical Biology and Medicine** (2016) 97, 204-211 [PubMed Link](#)

42. Éva Dóka, Irina Pader, Adrienn Bíró, Katarina Johansson, Qing Cheng, Krisztina Ballagó, Justin R. Prigge, Daniel Pastor-Flores, Tobias P. Dick, Edward E. Schmidt, Elias S. J. Arnér and Péter Nagy\*  
*Novel persulfide detection method reveals protein persulfide and polysulfide reducing functions of thioredoxin- and glutathione-systems*  
**Science Advances** (2016) 2(1):e1500968. [PubMed Link](#)
41. Miriam M. Cortese-Krott, Gunter GC Kuhnle, Alex Dyson, Bernadette O. Fernandez, Marian Grman, Jenna F. DuMond, Mark P Barrow, George McLeod, Hidehiko Nakagawa, Karol Ondrias, Péter Nagy, S. Bruce King, Joseph Saavedra, Larry Keefer, Mervyn Singer, Malte Kelm, Anthony R. Butler, Martin Feelisch,  
*The key bioactive reaction products of the NO/H<sub>2</sub>S interaction are S/N hybrid species, polysulfides, and nitroxyl.*  
**Proceedings of the National Academy of Sciences of the United States of America** (2015) 112(34), E4651-E4660. [PubMed Link](#) Commentary: CL. Bianco and JM. Fukuto PNAS (2015) 112 (34) 10573
40. David Peralta, Agnieszka K. Bronowska, Bruce Morgan, Éva Dóka, Koen Van Laer, Péter Nagy, Frauke Gräter and Tobias P. Dick  
*A proton relay enhances H<sub>2</sub>O<sub>2</sub>-sensitivity of GAPDH to facilitate metabolic adaptation under oxidative stress*  
**Nature Chemical Biology** (2015) 11, 156-163. [PubMed Link](#)
39. Tamás Baranyai, Kata Herczeg, Zsófia Onódi, István Voszka, Károly Módos, Nikolett Marton, György Nagy, Imre Mäger, Matthew J. Wood, Samir El Andaloussi, Zoltán Pálinkás, Vikas Kumar, Péter Nagy, Agnes Kittel, Edit Irén Buzás, Péter Ferdinandy, Zoltán Giricz  
*Isolation of Exosomes from Blood Plasma: Qualitative and Quantitative Comparison of Ultracentrifugation and Size Exclusion Chromatography Methods*  
**Plos One** (2015) 10(12):e0145686 [PubMed Link](#)
38. Adam Gondos, Lina Jansen, Jörg Heil, Andreas Schneeweiss, Adri C. Voogd, Jan Frisell, Irma Fredriksson, Ulla Johansson, Tove Filtenborg Tvedskov, Maj-Britt Jensen, Eva Balslev, Olaf Johan Hartmann-Johnsen, Milena Sant, Paolo Baili, Roberto Agresti, Tony van de Velde, Annegien Broeks, Jean-Marie Nogaret, Pierre Bourgeois, Michel Moreau, Zoltán Mátrai, Ákos Sávolt, Péter Nagy, Miklós Kásler, Petra Schrotz-King, Cornelia Ulrich, Hermann Brenner  
*Time trends in axilla management among early breast cancer patients: persisting major variation in clinical practice across European centers*  
**Acta Oncologica** (2016) 55(6), 712- 719 [PubMed Link](#)
37. Krisztián Nagyiványi, Barna Budai, Krisztina Bíró, Fruzsina Gyergyay, László Noszek, Zsófia Küronya, Hajnalka Németh, Péter Nagy, Lajos Gécz  
*Synergistic Survival: A New Phenomenon Connected to Adverse Events of First-Line Sunitinib Treatment in Advanced Renal Cell Carcinoma*  
**Clinical Genitourinary Cancer** (2016) 14(4), 314-322. [PubMed Link](#)
36. Jianqiang Xu, Sofi E. Eriksson, Marcus Cebula, Tatyana Sandalova, Elisabeth Hedström, Irina Pader, Qing Cheng, Charles R. Myers, William E. Antholine, Péter Nagy, Ulf Hellman, Galina Selivanova, Ylva Lindqvist, Elias S. J. Arnér  
*The conserved Trp114 residue of thioredoxin reductase 1 has a redox sensor-like function triggering oligomerisation and crosslinking upon oxidative stress related to cell death*  
**Cell Death and Disease - Nature** (2015) 6: p. e1616. [PubMed Link](#) 
35. Zoltán Pálinkás, Paul G. Furtmüller, Attila Nagy, Christa Jakopitsch, Katharina F. Pirker, Marcin Magierowski, Katarzyna Jasnos, John L. Wallace, Christian Obinger and Péter Nagy\*  
*Interactions of hydrogen sulfide with myeloperoxidase*  
**British Journal of Pharmacology** (2015) 172, 1516-1532. [PubMed Link](#)
34. Anita Vasas, Éva Dóka, István Fábián, Péter Nagy\*  
*Kinetic and thermodynamic studies on the disulfide-bond reducing potential of hydrogen sulfide*  
**Nitric Oxide Biology and Chemistry** (2015) 46, 93-101. Hydrogen Sulfide Biology and Therapeutic Applications special issue, Edited by Prof. Hideo Kimura [PubMed Link](#)

33. Andrea Berenyiova, Marian Grman, Ana Mijuskovic, Andrej Stasko, Anton Misak, **Péter Nagy**, Elena Ondriasova, Sona Cacanyiova, Vlasta Brezova, Martin Feelisch, Karol Ondrias  
*The reaction products of sulfide and S-nitrosoglutathione are potent vasorelaxants*  
**Nitric Oxide Biology and Chemistry** (2015) 46, 123-130. Hydrogen Sulfide Biology and Therapeutic Applications special issue, Edited by Prof. Hideo Kimura [PubMed Link](#)
32. Katsuhiko Ono, Takaake Akaike, Tomohiro Sawa, Yoshito Kumagai, David A Wink, Dean J Tantillo, Adrian J Hobbs, **Péter Nagy**, Ming Xian, Joseph Lin, Jon M Fukuto  
*The Redox Chemistry and Chemical Biology of H<sub>2</sub>S, Hydropersulfides and Derived Species: Implications to Their Possible Biological Activity and Utility*  
**Free Radical Biology and Medicine** (2014) 77, 82-94. [PubMed Link](#)
31. Andrew Das, Thomas Nauser, Willem H. Koppenol, Anthony J Kettle, Christine C. Winterbourn and **Péter Nagy\***  
*Rapid reaction of superoxide with insulin-tyrosyl radicals to generate a hydroperoxide with subsequent glutathione addition*  
**Free Radical Biology and Medicine** (2014) 70, 86-95. [PubMed Link](#)
30. Miriam M. Cortese-Krott, Bernadette O. Fernandez, José LT Santos, Evanthia Mergia, Marian Grman, **Péter Nagy**, Malte Kelm, Anthony Butler, Martin Feelisch\*  
*Nitrosopersulfide (ONSS-) accounts for sustained NO bioactivity of S-nitrosothiols following reaction with sulfide*  
**Redox Biology** (2014) 2, 234-244. [PubMed Link](#)
29. **Péter Nagy\***, Zoltán Pálinkás, Attila Nagy, Barna Budai, Imre Tóth, Anita Vasas  
*Chemical aspects of hydrogen sulfide measurements in physiological samples*  
**Biochimica et Biophysica Acta** invited review for the "Current methods to study reactive oxygen species – strengths and limitations" (2014) 1840, 876-891. [PubMed Link](#)
28. Romy Greiner, Zoltán Pálinkás, Katrin Bäsell, Dörte Becher, Haike Antelmann, **Péter Nagy** and Tobias P. Dick  
*Polysulfides link H<sub>2</sub>S to protein thiol oxidation*  
**Antioxidants and Redox Signaling** (2013) 19(15), 1749-1765. [PubMed Link](#)
27. **Péter Nagy\***  
*Kinetics and Mechanisms of Thiol-Disulfide Exchange Covering Direct Substitution and Thiol Oxidation-Mediated Pathways*  
**Antioxidants and Redox Signaling** Thiol-Disulfide Exchange Forum Issue (2012) Invited review (2013) 18(13), 1623-1641. [PubMed Link](#)
26. **Péter Nagy**, Thomas P. Lechte, Andrew B. Das and Christine C. Winterbourn  
*Conjugation of Glutathione to Oxidized Tyrosine Residues in Peptides and Proteins*  
**Journal of Biological Chemistry** (2012) 287, 26068-26076. [PubMed Link](#)  
Spotlighted in Chemical Research in Toxicology (2012) 25, 1544
25. **Péter Nagy\***, Amir Karton, Andrea Betz, Alexander V. Peskin, Paul Pace, Robert O'Reilly, Mark B. Hampton, Leo Radom, and Christine C. Winterbourn  
*Model for the Exceptional Reactivity of Peroxiredoxins 2 and 3 with Hydrogen Peroxide; A Kinetic and Computational Study*  
**Journal of Biological Chemistry** (2011) 286, 18048-18055. [PubMed Link](#)
24. **Péter Nagy\*** and Christine C. Winterbourn  
*Rapid Reaction of Hydrogen Sulfide with the Neutrophil Oxidant Hypochlorous Acid to Generate Polysulfides*  
**Chemical Research in Toxicology** Rapid Reports (2010) 23, 1541-1543. [PubMed Link](#)
23. Alexander V. Peskin, Andrew G. Cox, **Péter Nagy**, Philipp E. Morgan, Michael J. Davies, Mark B. Hampton and Christine C. Winterbourn  
*Rapid Removal of Amino acid, Peptide and Protein Hydroperoxides by Reaction with Peroxiredoxin 2&3*  
**Biochemical Journal** (2010) 432, 313-321. [PubMed Link](#)



22. Stephanie M. Bozonet, Amy Scott-Thomas, **Péter Nagy**, and Margreet C. M. Vissers  
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