

ABRAHAM NYSKA - CURRICULUM VITAE

Updated November 2026

ABRAHAM NYSKA, DVM, Diplome, European College of Veterinary pathology (Dipl. ECVP), Fellow IATP,

Expert in Toxicologic Pathology

Visiting Full Professor of Pathology

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Quality – Professionalism – Efficiency

- *Expert in Toxicological Pathology,*
- *Doctorate of Veterinary Medicine (DVM),*
- *Diplome of the European College of Veterinary Pathology (Dipl. ECVP),*
- *Fellow International Academy of Toxicologic Pathology (Fellow IATP)*
- *Visiting Full Professor of Veterinary Pathology (Tel Aviv University),*
- *Certification in Veterinary Anatomical Pathology*

DR. ABRAHAM NYSKA : SUMMARY OF BIOGRAPHY AND EXPERTISE:

- Prof. Abraham Nyska is an expert in toxicologic pathology, holding two diplomas and formal recognition in toxicologic pathology, reflecting the highest recognition by the most highly-regarded international professional organizations. These formal professional recognitions are very relevant and important to the regulatory agencies.

1. Diplome of the European College of Veterinary Pathologist (Board ECVP)

<https://ebvs.eu/colleges/ECVP/members/prof-abraham-nyska>

2. Fellow of the International Academy of Toxicologic Pathology (IATP)

<http://iatpfellow.org/index.php>

- Prof. Abraham Nyska, is a Visiting Full Professor of Pathology, Sackler School of Medicine, Tel Aviv University.

- Prof. Nyska has more than 45 years' experience in evaluation and pre-clinical risk assessment regarding safety-related toxicologic and experimental pathology of chemicals, drugs, medical devices and stem cells.
- He worked for 10 years as a staff scientist and expert in Toxicologic Pathology at the American National Toxicology Program (NTP) of the National Institute of Health (NIH), followed by 8 year as an NTP Consultant.
- Prof. Nyska serves as an Associate Editor of "Toxicologic Pathology". He has strong research-oriented attitude and vast collaboration with top federal research institutes (i.e., NIH, EPA) and academic institutes, with more than **529 publications** in peer-reviewed journals. Prof. Nyska is a consultant in Toxicologic Pathology to pharmaceutical companies, CRO's, and Federal institutes in Israel, Europe, India and the USA.
- His considerable deep knowledge, long-standing expertise, and dedication in the area of Toxicologic Pathology has earned him twice the highly valued NIH Director Award "In recognition of consistent dedication and teamwork, insuring quality evaluation and interpretation of pathology aspects of NTP studies", and "For highly significant scientific and technical contributions to the analysis and reporting of the NTP "dioxin-like chemicals" initiative".

VISION STATEMENT

To provide top global professional service to researchers in the environmental sciences and other disciplines by advancing knowledge to enhance human health

PERSONAL INFORMATION

Birth Petach Tiqva, Israel, July 26, 1951

Status Married with three children

Address in Israel (Office)

Abraham Nyska, DVM, Diplomate ECVP, Fellow IATP

Expert in Toxicologic Pathology

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PROFESSIONAL INFORMATION

Specialization in toxicological pathology, experimental pathology and veterinary diagnostic.

Academic studies and degree:

- 1972 – 1977 – DVM degree, University of Bologna, Italy.

Postgraduate training:

- 1977 – 1978 - Specialization in veterinary pathology, Kimron Veterinary Institute, Department of Pathology, Israel.
- 1978-1980 - Specialization in Toxicologic Pathology, Laboratories of Life Science Research, England.
- 1996 - Diplomate of the European College of Veterinary Pathology (Dipl. ECVP). <http://www.ecvpath.org/>

Academic appointment:

- 1988 – 1996 - Clinical Associate Professor of Veterinary Pathology, Hebrew University of Jerusalem.
- Degree of A+ (equivalent to academic degree of Full Professor) at the National Agriculture Center (Volcani Institute), Ministry of Agriculture
- 2005 - Visiting Full Professor, Sackler School of Medicine, Tel-Aviv University

Academic teaching experience:

- 1988 – 1996 – Courses in Veterinary Pathology. Koret School of Veterinary Medicine, Hebrew University of Jerusalem.
- 2005 - and on - Courses in Toxicologic Pathology. Sackler School of Medicine, Tel-Aviv University

Employment:

- 1977- 1979 – Training in veterinary diagnostic pathology. Pathology department of the “Kimron Veterinary Institute” (under the supervision of Prof. Teodore Nobel.
- 1978-1980 - Toxicologic pathologist, Laboratories of Life Science Research, England.
- 1980-1990 - Established and managed Department of Pathology, Life Science Research Israel (LSRI), Israel Institute for Biological Research (IIBR).
- 1990- 1996 – Expert in veterinary pathology., Pathology department of the “Kimron Veterinary Institute”. Achieving the degree of A+ (equivalent to academic degree of Full Professor) at the National Agriculture Center (Volcani Institute), Ministry of Agriculture.
- 1996 – 1997 - Visiting Scientist, Expert Toxicological Pathologist, National Institute of Environmental Health Sciences (NIEHS) of the National Institutes of Health, National Toxicology Program and Laboratory of Experimental Pathology, Research Triangle Park, NC, USA.
- 1998 - 2005 - Staff Scientist, NIEHS, Research Triangle Park, NC, USA.
- 2005 - on - Consultant in Toxicologic Pathology

RECENT HONORS AND AWARDS

- * NIH Director's Award, June, 2000
- * NIH Employee Staff Recognition Award, August, 2000
- * NIH Employee Staff Recognition Award, August, 2001
- * NIH Employee Staff Recognition Award, August, 2002
- * "Role of oxidative stress in indium phosphide-induced lung carcinogenesis in rats," Barbara C. Gottschling, Robert R Maronpot, James R. Hailey, Shyamal Peddada, Cindy R. Moomaw, James E. Klaunig, and Abraham Nyska was selected as "Toxicological Highlight" in *Toxicological Sciences*: "The article integrates a traditional pathologic study of toxicant-induced pulmonary carcinogenesis with an immunohistologic assessment of oxidative stress, thereby determining a potential mechanism of action of a toxicant, specifically indium phosphide (2001, 64:28-40)."
- * My research "Inhaled environmental combustion particles cause myocardial injury in the Wistar Kyoto rat," was selected to receive the 2003 Best Paper Award granted by the Board of Publications of the Society of Toxicology of *Toxicological Sciences*.
- * NIH Employee Staff Recognition Award, April, 2004
- * NIH Employee Staff Recognition Award, August, 2004
- * NIEHS Merit Award, December, 2004 (NTP pathologist, carcinogenicity studies of 7 dioxin- like compounds)
- * The following paper has been selected as winner of the Best Paper On behalf of the Risk Assessment Specialty Section (RASS) of the SOT, Demonstrating the Application of Risk Assessment for 2005.
Walker, N. J., Crockett, P. W., **Nyska, A.**, Brix, A. E., Jokinen, M. P., Sells, D. M., Hailey, J. R., Easterling, M., Haseman, J. K., Yin, M., Wyde, M. E., Bucher, J. R., and Portier, C. J. (2005). Dose-additive carcinogenicity of a defined mixture of "dioxin-like compounds". *Environ. Health Perspect.* 113(1), 43-48.
- * The following paper has been selected as winner of the Best Paper on behalf of the Society of Toxicologic Pathology, 2007
Elmore S, Zheng C, Baum B, Irwin R, **Nyska A**, (2006). The Transduction Of Rat Submandibular Glands By An Adenoviral Vector Carrying The Human Growth Hormone Gene Is Associated with Limited and Reversible Changes at the Injection Site. *Toxicol. Pathol.* 34: 385-392
- * Work chosen for journal covers, examples are as follows:
- = **Nyska A**, Murphy E, Foley JF, Collins BJ, Petranka J, Howden R, Hanlon P, Dunnick JK (2005). Acute Hemorrhagic Myocardial Necrosis and Sudden Death of Rats Exposed to a Combination of Ephedrine and Caffeine. *Toxicological Sciences*. 83:388-396.
- = Kodavanti UP, Moyer C, Ledbetter AD, Schladweiler MC, Costa DL, Hauser R, Christiani DC, **Nyska A** (2003). Inhaled environmental combustion particles cause myocardial injury in the Wistar Kyoto rat. *Toxicol. Sci.* 71: 237-245.

- = **Nyska A**, Moomaw CR, Foley JF, Maronpot RR, Malarkey DE, Cummings CM, Peddada S, Moyer CF, Allen DG, Travlos G, Chan PC (2002). The Hepatic Endothelial Carcinogen Riddelliine Induces Endothelial Apoptosis, Mitosis, S phase, and p53 and Hepatocytic Vascular Endothelial-Growth-Factor Expression After Short-term Exposure. *Toxicol. App. Pharmacol.* 184: 153-164

2017: USEPA STAA Level 3. For: Evaluating naturally occurring asbestos toxicity to inform risk assessment of contaminated sites.

" Level III: Level III awards are for those who have accomplished an unusually notable research or technological effort. The awards are for a substantial revision or modification of a scientific/technological principle or procedure, or an important improvement to the value of a device, activity, program, or service to the public. Awarded research relates to a mission or organizational component of the EPA, or significantly affects a relevant area of science/technology "

The STAA is based on 3 papers published between 2012-2016 as follows, and justifications and other background information in the submission are attached.

Cyphert, J. M., A. Nyska, R. K. Mahoney, M. C. Schladweiler, U. P. Kodavanti, and **S. H. Gavett**. Sumas Mountain chrysotile induces greater lung fibrosis in Fischer 344 rats than Libby amphibole, El Dorado tremolite, and Ontario ferroactinolite. [*Toxicol. Sci.* 130:405-415, 2012](#). doi: 10.1093/toxsci/kfs249 Epub 2012 Aug 17.

Kodavanti, U. P., D. Andrews, M. C Schladweiler, **S. H. Gavett**, D. E. Dodd, and J. M. Cyphert. Early and delayed effects of naturally occurring asbestos on serum biomarkers of inflammation and metabolism. [*J. Toxicol. Environ. Health A.* 77:1024-1039, 2014](#). doi: 10.1080/15287394.

Cyphert, J. M., M. A. McGee, A. Nyska, M. C. Schladweiler, U. P. Kodavanti, and **S. H. Gavett**. Long-term toxicity of naturally occurring asbestos in male Fischer 344 rats. [*J. Toxicol. Environ. Health A.* 79:49-60, 2016](#). doi: 10.1080/15287394.2015.1099123. Epub 2016 Jan 28.

RECENT EDITORIAL POSITIONS

2002 – present

Associate Editor of *Toxicologic Pathology*, the official journal of the American Society of Toxicologic Pathology

2005 – present

Editorial Board, *Toxicological Sciences*, official journal of the American Society of Toxicology.

RECENT MEMBERSHIP IN PROFESSIONAL COMMITTEES

- Member of national and international expert groups dealing with risk evaluation of chemicals, such as the 2-butoxyethanol and riddelline
- Member of expert committee of the Society of Toxicologic Pathology (IN HAND) dealing with the immune system
- Member of expert committee of the Society of Toxicologic Pathology (IN HAND) dealing with the Cardiovascular system
- Member of expert committee of the Society of Toxicologic Pathology (IN HAND) dealing with the Liver
- Member of expert committee of the Society of Toxicologic Pathology dealing with the Liver hypertrophy

RECENT CONTINUING EDUCATION COURSES

- STP Virtual Continuing Education Course: Vaccine Development from the Pathologist Perspective, held on August 28, 2020.

LIST OF PUBLICATIONS (ARTICLES IN REVIEWED JOURNALS)

- (1) Nobel TA, Klopfer U, Perl S, **Nyska A** (1979). Neoplasms of domestic mammals in Israel (1969-1979). *Refuah Vet.* 36:23-26. (Hebrew and English)
- (2) **Nyska A**, Perl S, Klopfer U, Nobel TA, Kariv N (1979). Two cases of feline spontaneous cerebellar ataxis related to panleucopenia. *Refuah Vet.* 36:47-52. (Hebrew and English)
- (3) **Nyska A**, Perl S, Kaufman I, Perl W, Nobel TA (1979). Ovine cerebrocortical necrosis in an Israeli sheep flock. *Refuah Vet.* 36:135-138. (Hebrew and English)
- (4) Perl S, Klopfer U, **Nyska A**, Bornstein S (1979). A case of female pseudohermaphroditism in a dog. *Refuah Vet.* 36:143-145. (Hebrew and English)
- (5) Perl S, **Nyska A**, Klopfer U, Nobel TA (1979). Laboratory diagnosis of rabies in Israel, 1962-1978. *Refuah Vet.* 36:163-169. (Hebrew and English)
- (6) **Nyska A**, BarGai W, Perl S (1980). Stomach invagination of oesophagus in a dog: A case report. *Refuah Vet.* 36:146-147. (Hebrew and English)
- (7) Kuttin E, Feldman H, Perl S, **Nyska A**, Nobel TA, Trainin R (1980). Canine nocardiosis in Israel. *Refuah Vet.* 37:15-23. (Hebrew and English)
- (8) Nobel TA, Klopfer U, **Nyska A**, Perl S (1981). Feline infectious peritonitis - first case in Israel. *Refuah Vet.* 37:39-41. (Hebrew and English)
- (9) **Nyska A**, Perl S, Klopfer U, Nobel TA, Hilton B (1981). Tumours in the nasal cavity of dogs: A description of five cases. *Refuah Vet.* 37:145-150. (Hebrew and English)
- (10) Perl S, **Nyska A**, Tromp A (1981). Abscess in hypophysis of a cow. *Refuah Vet.* 37:175-176. (Hebrew and English)
- (11) Nobel TA, Klopfer U, Perl S, **Nyska A**, Newmann M (1981). Histopathology of genital besnoitiosis of cows in Israel. *Vet. Parasitol.* 8:271-276.
- (12) Ashkenazy D, Friedman J, Kashman Y, Egyed MN, Shlosberg A, **Nyska A** (1984). Photosensitisation in ducklings, induced by *Pituranthos triradiatus*. *Vet. Hum. Toxicol.* 26:118-120.
- (13) **Nyska A**, Bar Ishak YR, Ashkenazy D, Friedman J, Kashman Y, Lelyveld J (1984). Retinal atrophy in albino rats associated with *Pituranthos triradiatus*-induced photosensitisation. *Vet. Pathol.* 21:551-552.
- (14) Ashkenazy D, Kashman Y, **Nyska A**, Friedman Y (1985). Furocumarins in shoots of *Pituranthos triradiatus* as protectants against grazing of hyrax. *J. Chem. Ecol.* 2:231-239.
- (15) Haan BD, Porat S, **Nyska A**, Titlbaum A, Wexler MA (1986). The effects of cold upon bone growth. *Ann. Plast. Surg.* 16:509-515.
- (16) Nobel TA, **Nyska A**, Pirak M, Meshorer A (1987). Epidermal cysts in the central nervous system of mice. *J. Comp. Pathol.* 97:357-359.
- (17) **Nyska M**, Porat S, **Nyska A**, Russo M, Shoshan S (1987). Decreased adhesion formation of flexor tendons by topical application of enriched collagen solution - a histological study. *Arch. Orthop. Trauma Surg.* 106:192-194.

- (18) **Nyska A**, Waner T, Pirak M (1987). Thyroideal hypertrophy and hepatic microsomal induction. *Isr. J. Vet. Med.* 43:228-235.
- (19) Porat S, Orth MC, Nyska M, **Nyska A**, Fields S (1987). Assessment of bony bridge by computed tomography. Experimental model in the rabbit and clinical application. *J. Pediatr. Orthop.* 7:155-160.
- (20) Waner T, **Nyska A** (1988). Thyroxine (T4) and triiodothyronine (T3) levels in the Fischer F344 inbred rat. *Lab. Anim.* 22:276-280.
- (21) **Nyska A**, Kuttin ES (1988). Upper respiratory tract infection in mouse and rats. *Mycopathologia* 101:95-98.
- (22) Kuttin ES, **Nyska A** (1988). Cryptococcosis of the nasopharynx in mice and rats. *Mycopathologia* 101:99-104.
- (23) Ben-Dahon J, Gross D, Abu Dabu H, Klein B, Landau EH, **Nyska A**, Krauz MM (1988). The effect of prostaglandin and leukotriene antagonists in acute mesenteric artery occlusion. *Eur. J. Surg. Res.* 20:310-319.
- (24) Pirak M, **Nyska A**, Shahar A, Scolnik M, Waner T (1988). Cytomorphological description of an abdominal extra-adrenal paraganglioma in a Fischer 344 rat. *Lab. Anim. Sci.* 38:736-738.
- (25) Waner T, **Nyska A**, Sela M, Pirak M, Galiano A (1988). Gingival hyperplasia in dogs induced by oxodipine, a calcium channel blocking agent. *Toxicol. Pathol.* 16:327-332.
- (26) **Nyska A**, Waner T, Klein B, Pirak M, Gordon E, Bracha P (1989) The renal carcinogenic effect of Merpafol in the Fischer 344 rat. *Isr. J. Med. Sci.* 25:428-432.
- (27) Zlotogorski A, Nyska M, Sela M, **Nyska A**, Gotsman M (1989) Niphedipine-induced gingival hyperplasia: case reports and literature review. *Isr. J. Med. Sci.* 25:453-455.
- (28) **Nyska A**, Waner T, Scolnik M, Zuckerman A, Pirak M, Gordon EB, Kuehnberg W (1989). Splenic haemosiderosis: A quantitative evaluation of haemosiderin by means of an automatic image analyzer. *Hum. Vet. Toxicol.* 31:218-221.
- (29) Laor O, Waner T, Galiano A, **Nyska A** (1989). Recovery from gingival hyperplasia induced by oxodipine, a calcium channel blocker. *Arch. Toxicol.* 13 (suppl.):433-435.
- (30) **Nyska A**, Waner T, Pirak M, Albeck M, Sredni B (1989). Subacute intraperitoneal toxicity in rats of a new tellurium based immunomodulating drug AS-101. *Arch. Toxicol.* 63:386-393.
- (31) Swissa-Sivan A, Simkin A, Leichter I, **Nyska A**, Nyska M, Statter M, Bivas A, Samueloff S (1989). Effect of swimming on bone growth and development in young rats. *Bone Mineral* 7:91-105.
- (32) Nyska M, Sparler AD, Howard CB, **Nyska A**, Dekel S (1989). Ankle extensor teno-synovitis due to date palm thorn. *Foot Ankle* 10:180-183.
- (33) Waner T, Yuval D, **Nyska A** (1989). Electronic measurement of canine mean platelet volume. *Vet. Clin. Pathol.* 18:84-86.
- (34) Shapira Z, Terkel J, Egozi Y, **Nyska A**, Friedman J (1989). Abortifacient potential for the epigeal parts of *Peganum harmala*. *J. Ethnopharmacol.* 27:319-325.
- (35) Klein B, Klein T, Kunzevski M, **Nyska A**, Luria H, Livni E (1990). The expression of HLA Class I antigen in testicular cancer. *Am. J. Clin. Pathol.* 93:202-207.

- (36) Waner T, **Nyska A**, Bogin E, Levy R, Galiano A (1990). Drug induced decreased aminotransferase activity in the rat as a result of treatment with oxodipine - a new calcium channel blocker. *J. Clin. Chem. Clin. Biochem.* 28:25-30.
- (37) **Nyska A**, Waner T, Pirak M, Galiano A, Zlotogorski A (1990). Gingival hyperplasia in rats induced by oxodipine, a calcium channel blocker. *J. Periodontal Res.* 25:65-68.
- (38) Sperber AD, Nyska M, Howard CB, Dekel S, **Nyska A** (1990). Date palm thorn injury - an animal model. *Isr. J. Med. Sci.* 26:58-60.
- (39) **Nyska A**, Waner T, Zlotogorski A, Nyska M, Pirak M, Scolnik M, Galiano A (1990). Animal model of human disease - Oxodipine induced gingival hyperplasia in Beagle dogs. *Am. J. Pathol.* 137:737-739.
- (40) Wormser U, Ben Zakine S, **Nyska A** (1990) The liver slice system: a simple and reliable acute toxicity test for assessment of hepatotoxins and their antidotes. *Toxicol. In Vitro* 4:449-451.
- (41) Wormser U, Ben-Zakine S, Stivelband E, Eisen O, **Nyska A** (1990). The liver slice system: A rapid *in vitro* acute toxicity test for primary screening of hepatotoxic agents. *Toxicol. In Vitro* 4:783-789.
- (42) Wormser I, Ben-Zakine S, **Nyska A** (1990). Cadmium-induced metallothionein synthesis in the rat liver slice system. *Toxicol. In Vitro* 4:791-794.
- (43) Swissa-Siwan A, Azoury R, Statten M, Leichter I, **Nyska A**, Nyska M, Menczel J, Samueloff S (1990). The effect of swimming on bone modelling and composition in young adult rats. *Calcif. Tissue Int.* 47:173-177.
- (44) Shapira Z, Terkel J, Egozi J, **Nyska A**, Friedman J (1990). Reduction of rodent fertility by plant consumption with particular reference to *Ziziphus spina christi*. *J. Chem. Ecol.* 16:2019-2026.
- (45) **Nyska A**, Waner T, Gordon EB, Bracha P, Klein B (1990). Induction of gastrointestinal tumours in mice fed folpet - possible mechanisms. *Japanese J. Cancer Res.* 81:545-549.
- (46) Shapiro Y, Yadid G, Cotev S, **Nyska A**, Shohami E (1990). Protective effect of MK-801 in experimental brain injury. *J. Neurotrauma* 7:131-139.
- (47) Zlotogorski A, **Nyska A** (1990). Gingival hyperplasia induced by calcium channel blockers (Letter to the Editor). *Int. J. Oral Maxillofac. Surg.* 19:315.
- (48) Klein B, Klein T, **Nyska A**, Shapira J, Figer A, Schwartz A, Rakovsky E, Livni E, Lurie H (1991). The expression of HLA Class I and Class II in gastric carcinoma in relation to pathological stage. *Tumour Biol.* 12:68-74.
- (49) Waner T, **Nyska A** (1991). Review: The toxicological significance of declines in the activities of blood alanine and aspartate aminotransferase. *Vet. Res. Commun.* 15:73-78.
- (50) Pirak M, Waner T, Abramovici A, Scolnik M, **Nyska A** (1991). Spontaneous choriocarcinoma in a male Sprague-Dawley rat: A histological and immunohistochemical study. *Vet. Pathol.* 8:93-95.
- (51) Waner T, **Nyska A**, Chen R (1991). Distribution profile of the activities of blood alanine and aspartate aminotransferases in the normal Fischer 344 inbred rat throughout its life-span as a function of age and sex. *Lab. Anim.* 25:280-289.
- (52) **Nyska A**, Pirak M, Shahar A, Scolnik M, Waner T (1991). Spontaneous uterine granular cell tumour in the Fischer 344 rat. *Lab. Anim.* 25:299-302.

- (53) **Nyska A**, Waner T, Tal N, Dayan D (1991). Spontaneous ameloblastic-fibro-odontoma in a female CD-1 mouse. *Oral Pathol. Med.* 20:250-252.
- (54) **Nyska A**, Waner T, Goldstein J, Bar Joseph A, Pirak M (1991). Spontaneous rete testes adenocarcinoma in a Fischer 344 rat. A cytomorphological and ultrastructural study. *J. Comp. Pathol.* 104:449-459.
- (55) Klein B, Klein T, Figer A, Bleiberg M, Shapira J, Lurie H, **Nyska A** (1991). Soluble HLA Class I in breast cancer patients in relation to tumour burden. *Cancer* 67:2295-2299.
- (56) Wormser U, Ben Zakine S, **Nyska A** (1991). Hepatic and renal metallothioneine induction in the rat and mouse after treatment with furosemide. *Biochem. Int.* 23:419-428.
- (57) Waner T, Pirak M, **Nyska A** (1991). Lungworm in colony of Beagle dogs: a case report and literature review. *Isr. J. Vet. Sci.* 46:106-109. (Hebrew and English)
- (58) Kuttin ES, Waner T, **Nyska A** (1991). Viral haemorrhagic disease in rabbits in Israel. *Isr. J. Vet. Sci.* 46:119-124. (Hebrew and English)
- (59) Waner T, **Nyska A** (1991). Gingival hyperplasia in dogs. *Compendium Vet. Med.* 13:1207-1213.
- (60) Wormser U, **Nyska A** (1991). Protective effect of o-phnanthroline against mechorethamine toxicity in the rat liver slice system and the guinea pig skin. *Arch. Toxicol.* 65:666-670.
- (61) Harmelin A, Shapira M, Ben-Ziony Y, Yakobson B, Perl S, **Nyska A**, Orgad U (1991). Prosteal osteosarcoma in a dog. *Isr. J. Vet. Sci.* 46:145-147.
- (62) Zusman I, Zimmer A, **Nyska A** (1991). Role of morphological methods in the analysis of chemically induced colon cancer in rats. *Acta Anat.* 142:351-356.
- (63) Yussim A, Sosna Y, Shapira Z, **Nyska A**, Prass M (1991). Azathioprine enhances experimental amyloidosis and attenuates colchicine protection against organ deposition of amyloid. *Transplant. Proc.* 23:2192-2193.
- (64) Zusman I, Zimmer A, Madar Z, **Nyska A** (1992). Morphological, histochemical, and immunohistochemical differences between tumorous and adjacent tissues in chemically induced colon cancer in rats. *Acta Anat.* 145:29-34.
- (65) **Nyska A**, Galiano A, Klein B, Waner T (1992). The fate of altered hepatocytic foci (AHF) as a result of treatment with oxodipine, a calcium channel blocker. *Pharmacol. Toxicol.* 70:439-442.
- (66) **Nyska A**, Waner T, Wormser U, Gur E, Kuttin ES, Dayan D (1992) Possible pitfalls in the rat dermal toxicity test. *Arch. Toxicol.* 66:339-346.
- (67) Harmelin A, Dubey JP, Yakobson B, **Nyska A**, Orgad U (1992). Concurrent Hepatozoon canis and Toxoplasma gondii infection in a dog. *Vet. Parasitol.* 43:131-136.
- (68) **Nyska A**, Waner T, Dayan D, Skutelski E, Shapira S, Galiano A (1992). Oxodipine, a calcium channel blocker, induced thickening of the zona glomerulosa in dogs. *Toxicol. Pathol.* 20:549-555.
- (69) Markovitz A, Harmelin A, Orgad U, Yakobson B, **Nyska A** (1992). A case of natural Hydatidosis in a baboon. *J. Comp. Pathol.* 106:435-438.

- (70) Nyska M, **Nyska A**, Wolter K (1992). The effect of thionaphthene-2-carboxylic acid (TNCA) on bone structure in the rat: a histomorphometric study. *Int. J. Exp. Patholol.* 73:733-740.
- (71) Zusman I, Madar Z, **Nyska A** (1992). Individual variability of pathological parameters in chemically induced rat colon cancer. *Acta Anat.* 145:106-111.
- (72) **Nyska A**, Harmelin A, Waner T, Klein B, Bar-Ishak R (1992). Intraocular vascular embolization of a malignant canine pheochromocytoma. *Prog. Vet. Comp. Ophthalmol.* 2:129-132.
- (73) Mosheiff R, Klein BY, Leichter I, Chaimsky G, **Nyska A**, Peyser A, Segal D (1992). Use of dual-energy X-ray absorptiometry (DEXA) to follow mineral content changes in small ceramic implants in rats. *Biomaterials* 13:462-466.
- (74) Dayan D, Waner T, Tal H, **Nyska A** (1993). Polarization microscopy of Picrosirius red-stained collagen from oxodipine-induced hyperplastic gingiva of Beagle dogs. *Int. J. Exp. Pathol.* 74:225-228.
- (75) **Nyska A**, Harmelin A, Baneth G, Yakobson B, Perl S, Orgad U (1993). Supracellar differentiated germ cell tumor in a male dog. *J. Vet. Diagn. Invest.* 5:462-467.
- (76) Madar Z, Timar B, **Nyska A**, Zusman I (1993). Effects of high-fiber diets on pathological changes in DMH-induced rat colon cancer. *Nutr. Cancer* 20:87-96.
- (77) Harmelin A, **Nyska A**, Aroch I, Yakobson B, Stren S, Orgad U, Waner T (1993). Canine medullary thyroid carcinoma with unusual distant metastases. *J. Vet. Diagn. Invest.* 5:284-288.
- (78) **Nyska A**, Eisenberg I, Orgad U, Balaish M, Waner T (1993). Congenital hypothyroidism and associated dwarfism in a pet tiger. *Feline Practice* 21:7-12.
- (79) **Nyska A**, Zuckerman A, Bar-Josef A, Orgad U, Waner T, Shohami E (1993). The application of image analysis as an aid in the evaluation of brain tissue damage - two case studies. *Isr. J. Vet. Sci.* 48:19-23. (Hebrew and English)
- (80) **Nyska A**, Harmelin A, Scolnick M, Zandbank Y, Waner T (1993). Intratubular spermatic seminoma in a Fischer 344 rat. *Toxicol. Pathol.* 21:397-401.
- (81) Harmelin A, **Nyska A**, Orgad U, Yakobson B, Waner T (1993). Ventral meningocele in a filly. *J. Comp. Pathol.* 109:93-97.
- (82) Yeruham I, **Nyska A**, Orgad U, Waner T (1993). Perianal squamous cell carcinoma in goats. *J. Vet. Med. (Zentralblatt fur Veterinarmedizin)* 40:432-436.
- (83) **Nyska A**, Conz A, Dayan D (1993). The classification of chemical carcinogens. A better understanding of their mode of action will change the regulatory authorities' approach. A review. *Eur. Bull. Drug Res.* 2:103-108.
- (84) Schneiman A, **Nyska A**, Aizenberg I, Waner T (1993). Canine pulmonary adenocarcinoma - a case report and review of the literature. *Isr. J. Vet. Sci.* 48:179-184. (Hebrew and English)
- (85) Hoffman A, Levi O, Orgad U, **Nyska A** (1993). Myocarditis followed envenomation with *Viper palestinae*. *Toxicon* 31:1623-1628.
- (86) Shenberg C, Boazi M, Cohen J, Klein A, Kojler M, **Nyska A** (1994). An XRF study of trace elements accumulation in kidneys of tumor bearing mice after treatment with cis-DDP with and without selenite and selenocistamine. *Biol. Trace Elem. Res.* 40:137-149.

- (87) Dayan D, Waner T, **Nyska A** (1994). Bilateral complex odontoma in a Swiss (CD-1) male mouse. *Lab. Anim.* 28:90-92.
- (88) Grinberg A, Kosak A, Khatib N, Samish M, Bar D, **Nyska A** (1994). Infectious thrombotic meningoencephalitis in calf - first diagnosed case in Israel. *Isr. J. Vet. Sci.* 49:20-22. (Hebrew and English)
- (89) **Nyska A**, Klein T, Waner T, Scolnik M, Klein B (1994). Unusually high incidence of spontaneous endometrial adenocarcinoma in aged virgin Fischer rats. *Exp. Toxicol. Pathol.* 46:7-9.
- (90) Waner T, **Nyska A** (1994). The influence of fasting on blood glucose, triglycerides, cholesterol and alkaline phosphatase in rats. *Vet. Clin. Pathol.* 23:78-80.
- (91) Klein B, Loven D, Lurie H, Rakowsky E, **Nyska A**, Levin I, Klein T (1994). The effect of irradiation on the expression of HLA class I antigens in human brain tumors in culture. *J. Neurosurg.* 80:1074-1077.
- (92) Yeruham I, **Nyska A**, Abraham A (1994). Parapox infection in a gazelle kid (*Gazella gazella*). *J. Wildl. Dis.* 30:260-262.
- (93) **Nyska A**, Waner T, Goldstein J, Horowitz Y, Harmelin A, Orgad U, Yakobson B (1994). Interstitial cell (Leidig) tumor in an eland (*Taurotragus oryx*): histologic and electron microscopic study. *J. Wildl. Dis.* 30:291-294.
- (94) Shlosberg A, Lublin A, Bahat O, Heymann GD, Hanji V, Ballaiche M, Mechani S, **Nyska A** (1994). Percutaneous exposure to ethyl parathion in a feral Griffon vulture. *Vet. Hum. Toxicol.* 36:224-226.
- (95) Waner T, Zuckerman A, Baneth G, **Nyska A** (1994). Hepatozoon Canis: size measurement of the gametocyte using image analysis technology. *Comp. Hematol. Int.* 4:177-179.
- (96) Gurevich P, Czernobilsky B, Ben-Hur H, **Nyska A**, Zuckerman A, Zusman I (1994). Pathology of lymphoid organs in low-birth-weight human fetuses subjected to antigen-induced influences: a morphological and morphometric study. *Pediatr. Pathol.* 14:679-693.
- (97) Yeruham I, Perl S, **Nyska A**, Abraham A, Davidson M, Haimovitch M, Zamir O, Grinstein H (1994). Adverse reactions in cattle to a capripox vaccine. *Vet. Rec.* 135:330-332.
- (98) Shenberg C, Boazi M, Cohen J, Klein A, Kojler M, **Nyska A**, Rave S (1994). BR/RB ratio by XRF analysis of kidneys of normal and tumor bearing mice treated with cis-DDP. *J. Trace Elem. Electrolytes Health Dis.* 8:177-182.
- (99) **Nyska A**, Shemesh M, Dayan D, Tal H (1994). Gingival hyperplasia induced by calcium channel blockers: mode of action. *Med. Hypotheses* 43:115-118.
- (100) Yeruham I, Abraham A, **Nyska A** (1994). Clinical and pathological description of chronic form of bovine papular stomatitis. *J. Comp. Pathol.* 111:279-286.
- (101) **Nyska A**, Skolnick M, Ziv G, Gulkarov A (1994). Correlation of injection site damage and serum creatine kinase (CK) activity in turkeys following intramuscular and subcutaneous administration of norfloxacin nicotinate. *Avian Pathol.* 23:671-682.
- (102) Hoffman A, **Nyska A**, Avramoff A, Golomb G (1994). Continuous versus pulsatile administration of erythropoietin (EPO) via the uterus in anemic rats. *Int. J. Pharmaceutics* 111:197-202.

- (103) Harrus S, Waner T, Shahar R, **Nyska A** (1994). Jejunal acinar type adenocarcinoma in a dog - A case report and review of the literature. *Canine Practice* 19:17-21.
- (104) Yeruham I, Rosen S, Yakobson B, **Nyska A** (1994). Severe infestation of imported roe deer (*Capreolus capreolus coxi*) by *Hypoderma diana* (Diptera: Hypodermatidae). *J. Wildl. Dis.* 30:552-553.
- (105) **Nyska A**, Friedman J (1994). Photosensitivity-induced retinal atrophy in albino rat (Letter to the editor). *Toxicol. Pathol.* 22:446.
- (106) **Nyska A**, Waner T, Galiano A, Fich A (1994). Constipation and megacolon in rats related to treatment with oxodipine, a calcium antagonist. *Toxicol. Pathol.* 22:589-594.
- (107) **Nyska A**, Dayan D (1995). Ameloblastic fibroma in a young cat. *J. Oral Pathol. Med.* 24:233-236.
- (108) **Nyska A**, Shamir M, Harmelin A, Zandbank Y, Waner T (1995). Gangliocytoma in a female dog. *Vet. Pathol.* 32:190-192.
- (109) Maraschin R, Bussi R, Conz A, Orlando L, Pirovano R, **Nyska A** (1995). Toxicological evaluation of u-hEGF (human epidermal growth factor). *Toxicol. Pathol.* 23:356-366.
- (110) Stark A, **Nyska A**, Zuckerman A, Madar Z (1995). Changes in intestinal tunica muscularis following dietary fiber feeding in rats - a morphometric study using image analysis. *Dig. Dis. Sci.* 40:960-966.
- (111) Harmelin A, Zuckerman A, **Nyska A** (1995). Morphometric correlation of Ag-NOR protein with prognosis in canine transmissible venereal tumor (TVT). *J. Comp. Pathol.* 112:429-433.
- (112) Yeruham I, Elad D, **Nyska A** (1995). Skin diseases in Merino sheep herd related to an excessively rainy winter in Mediterranean climate zone. *J. Vet. Med.* 42:35-40.
- (113) Waner T, Borelli G, Cadel S, Privman I, **Nyska A** (1995). Investigation of potential oncogenetic effects of beta-cyclodextrin in the rat and mouse. *Arch. Toxicol.* 69:631-639.
- (114) Yeruham I, Elad D, **Nyska A** (1995). A survey of dermatophilosis in Israeli dairy cattle. *Revue d'Elevage et de Medecine Veterinaire des Pays Tropicaux* 48:25-29.
- (115) **Nyska A**, Zusman I, Klein T, Sheila N, Weis O, Madar Z, Klein B (1995). Assessment of nucleolar organizer regions by automatic image analysis in benign and malignant colon tumours and adjacent tissues in rats. *J. Comp. Pathol.* 113:45-50.
- (116) Nyska M, **Nyska A**, Swissa-Sivan A, Samueloff S (1995). Histomorphometry of long bone growth plate in swimming rats. *Int. J. Exp. Pathol.* 76:241-245.
- (117) Harmelin A, Perl S, **Nyska A**, Yakobson B, Spigel N, Orgad U (1995). Neosporosis-associated bovine abortion in Israel (Letter to the Editor). *Vet. Rec.* 136:80.
- (118) Cohen A, **Nyska A**, Pollack A, Madar Z (1995). Aldose reductase activity and reduced glutathione content in lenses of diabetic sand rats fed with acarbose. *Br. J. Nutr.* 74:607-615.
- (119) Gurevich P, Ben-Hur H, Czernobilsky B, **Nyska A**, Zuckerman A, Zusman I (1995). Pathology of lymphoid organs in low-birth-weight infants subjected to antigen-related diseases: a morphological and morphometric study. *Pathology* 27:121-126.

- (120) Harari R, Shahar R, Zuckerman A, **Nyska A** (1995). Morphometric evaluation of malignancy of canine mammary tumor using the Ag-NOR method. *Isr. J. Vet. Sci.* 50:147-156. (Hebrew and English)
- (121) Yeruham I, Rosen S, Hadani A, **Nyska A** (1995). Sarcoptic mange in wild ruminants in Israel. *J. Wildl. Dis.* 32:57-61.
- (122) Rabau M, **Nyska A**, Dayan D (1995). In vitro effect of ciprofloxacin on HT-29 human colon carcinoma cell line: assessment of cell proliferation by thymidine uptake and silver nucleolar organizer regions (AgNOR) histomorphometry. *Arch. Toxicol.* 70:124-126.
- (123) Oberto G, Ammannati E, Marinelli P, Maraschin R, **Nyska A**, Komatsu SI (1995). Four-week repeated subcutaneous dose toxicity studies of SJ-0021 (r-hFSH) in rats. *Jap. Pharmacol. Ther.* 23:1861-1887.
- (124) Oberto G, Marinelli P, Conz A, Maraschin R, **Nyska A**, Komatsu SI (1995). Thirteen-week repeated subcutaneous dose toxicity studies of SJ-0021 (r-hFSH) in rats. *Jap. Pharmacol. Ther.* 23:1913-1929.
- (125) Harmelin A, Dubey JP, Perl S, **Nyska A**, Yakobson B, Spigel N, Orgad U (1995). Neosporosis - another cause of bovine abortions in Israel. *Isr. J. Vet. Sci.* 50:55-56.
- (126) Wormser U, Weisman Y, Ashash U, **Nyska A** (1995). In vitro cytotoxicity of sera of paralyzed ostrich chicks showing serological positivity for Borna disease virus. *Vet. Rec.* 138:418-419.
- (127) Schiffer J, Walach N, **Nyska A**, Lushkow G, Rothman S, Pollack L (1996). Brain effect of intracarotid administration of cisplatin. *Neurol. Res.* 18:87-88.
- (128) Yeruham I, Perl S, **Nyska A** (1996). Skin tumours in cattle and sheep after freeze or heat branding. *J. Comp. Pathol.* 116:101-106.
- (129) Stark A, **Nyska A**, Madar Z (1996). Metabolic and morphometric changes in small and large intestine in rats fed high fiber diet. *Toxicol. Pathol.* 24:166-171.
- (130) **Nyska A**, Dayan D (1996). Availability of canine model of calcium antagonist induced gingival hyperplasia (Letter to the Editor). *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology* 81:378-379.
- (131) Wormser U, Green BS, Arad-Yellin R, Brodsky B, Shatz I, **Nyska A** (1996). *In vivo* and *in vitro* toxicity of newly synthesized monofunctional sulfur mustard derivatives. *Toxicology* 108:125-128.
- (132) Schiffer J, Walach N, Lushkow G, **Nyska A**, Rothman S, Pollack L (1996). Effect of combination of cisplatin and radiation in the rabbit's brain. *Neurol. Res.* 18:454-456.
- (133) **Nyska A**, Godstein J, Eshkar G, Klein B (1996). Immunohistochemical study of pancreatic neuroendocrine tumor in *Panthera tigris tigris*. *J. Wildl. Dis.* 32:541-544.
- (134) Shaoul J, Leichter I, Weiss A, **Nyska A**, Moshieff R, Libergall M, Klein B (1996). Evaluation of mineralization in bFGF-adsorbed ceramic bone implants by DEXA and computerized histomorphometry. *Eur. J. Exp. Musculoskel. Res. Endodontics* 81:378-379.
- (135) Liberman V, **Nyska A**, Kashtan H, Zajicek G, Lubin F, Rozen P (1996). The differing proliferative responses in the proximal and distal colons of growing rats fed the human food eaten by adenoma patients. *Dig. Dis. Sci.* 41:1057-1064.

- (136) Reifen R, Ashkenazi A, Khoshoo V, **Nyska A** (1996). Immunohistochemical changes in an *in vitro* rat model of Celiac disease. *Cell Vision* 3:86-89.
- (137) Nyska M, **Nyska A**, Rivlin E, Pines M, Shoshan S, Nagler A (1996). Topically applied halofuginone, an inhibitor of collagen type I transcription, reduces peritendinous fibrous adhesions following surgery. *Connect. Tissue Res.* 34:97-103.
- (138) Zusman I, Gurevich P, Madar Z, **Nyska A**, Timar B, Zuckerman A (1996). Tumor-promoting and tumor-protective effects of high-fat diets on chemically induced mammary cancer in rats. *Anticancer Res.* 17:349-356.
- (139) Weinberger A, **Nyska A**, Giler S (1996). Treatment of experimental inflammatory synovitis with continuous magnetic field. *Isr. J. Med. Sci.* 32:1197-1201.
- (140) Perl S, Yeruham I, Algazi R, **Nyska A**, Yakobson B (1996). Scrapie in Israel: pathological findings and epizootiological aspects. *Isr. J. Vet. Med.* 51:59-61.
- (141) Yeruham I, Elad D, Perl S, **Nyska A**, Vishinski Y (1996). Contagious impetigo in dairy cattle herd. *Vet. Dermatol.* 7:239-242.
- (142) Yeruham I, **Nyska A**, Abraham A, Algazi R (1996). Occurrences of cowpox-like lesions in cattle in Israel. *Revue d'Elevage et de Medecine Veterinie des Pays Tropicaux* 49:299-302.
- (143) Klein T, Levin I, **Nyska A**, Koren R, Gal R, Schachter J, Kfir B, Narinski R, Warchaizer S, Klein B (1996). Correlation between tumour and serum β_2m expression in patients with breast cancer. *Eur. J. Immunogen.* 23:417-423.
- (144) Shlosberg A, Bellaiche M, Hanji V, **Nyska A**, Lublin A, Shemesh M, Shore L, Perk S, Berman E (1996). The effect of acetylsalicylic acid and cold stress on the susceptibility of broilers to the ascites syndrome. *Avian Pathol.* 5:581-590.
- (145) Pollack A, Madar Z, Eisner Z, **Nyska A**, Oren P (1996). Inhibitory effect of lycopene on cataract development in galactosemic rats. *Metab. Pediatr. Syst. Ophthalmol.* 19-20:31-36.
- (146) Wormser U, Brodsky B, Green BS, Arad-Yellin R, **Nyska A** (1997). Protective effect of providone-iodine ointment against skin lesions induced by sulfur and nitrogen mustards and by non-mustard vesicants. *Arch. Toxicol.* 71:165-170.
- (147) Shlosberg A, Bellaiche M, Gal R, **Nyska A** (1997). Lead toxicosis in a captive bottlenose dolphin (*Tursiops truncatus*) consequent to ingestion of air gun pellets. *J. Wildl. Dis.* 33:135-139.
- (148) Walach N, Lushkow G, **Nyska A**, Gur R, Pollack L, Schiffer J (1997). Effect of high single dose of cisplatin and of radiation in the rabbit's brain. *Neurol. Res.* 19:216-218.
- (149) Ofri R, **Nyska A**, Linke R, Shtrasburg S, Livneh A, Gal R (1997). Systemic amyloidosis in a cheetah (*Acinonyx jubatus*). *Amyloid: Int. J. Exp. Clin. Invest.* 4:98-103.
- (150) Harrus S, **Nyska A**, Colorni A, Markoviz A (1997). Sudden death due to *Paragonymus kellyi* infection in dog. *Vet. Parasitol.* 71:59-63.
- (151) Ter-Gregorov VS, Krifuks O, Liubashevski E, **Nyska A**, Trainin Z, Toder V (1997). A new transmissible AIDS-like disease in mice induced by alloimmune stimuli. *Nature Med.* 3:37-41.

- (152) Shaham-Albalancy A, **Nyska A**, Kaim M, Rosenberg M, Folman Y, Wolfenson D (1997). Delayed effect of progesterone on endometrial morphology in dairy cows. *Anim. Reprod. Sci.* 48:159-174.
- (153) Aroch I, **Nyska A**, Gal R, Barak H (1997). Functional intestinal hypomotility in association with neuronal damage in a dog. *J. Small Anim. Practice* 38:119-123.
- (154) Zusman I, Reifen R, Livni O, Smirnoff P, Gurevich P, Korol D, Sandler B, **Nyska A**, Gal R, Tendler Y, Madar Z (1997). Role of apoptosis, proliferating cell nuclear antigen and p53 protein in chemically induced colon cancer in rats fed corn cob fiber treated with fungus *Pleurotus ostreatus*. *Anticancer Res.* 17:2105-2113.
- (155) Shinar D, Finaly R, **Nyska A**, Mares AJ (1997). The use of collagen coated vicryl mesh (CCVM) in the reconstruction of the canine cervical oesophagus. *Ped. Surg. Int.* 13:84-87.
- (156) **Nyska A**, Leininger JR, Maronpot RR, Haseman JK, Hailey JR (1997). Effect of individual caging versus group caging on the incidence of pituitary tumors in F344 rats: proposed mechanism. *Med. Hypotheses* 50:525-529.
- (157) **Nyska A**, Maronpot RR, Eldridge SR, Haseman JK, Hailey JR (1997). Alteration in cell kinetics in control B6C3F1 mice infected with *Helicobacter hepaticus*. *Toxicol. Pathol.* 26:591-596.
- (158) Yeruham I, **Nyska A**, Orgad U (1997). Physiological sebaceous gland hyperplasia in sheep. *Isr. J. Vet. Med.* 52:17-18.
- (159) Ter-Gregorov V, Krifuks O, Liubashevsky E, **Nyska A**, Toder V, Trainin Z (1997). A new retroviral AIDS-like disease and/or acute leukemia induced in mice by alloimmune stimuli. *Leuk. Suppl.* 3:263-266.
- (160) Wormser U, Kohen R, Moor EV, Eldad A, Gal R, **Nyska A**, Brodsky B (1997). Non-invasive procedure for in situ determination of skin surface proteinase activity in animals; implications to human skin. *Arch. Dermatol. Res.* 289:686-691.
- (161) Tendler Y, Ben-Hur H, Gurevich P, Berman V, Sandler B, **Nyska A**, Zion H, Zinder O, Zusman I (1997). Role of apoptosis, proliferating cell nuclear antigen and p53 protein in the immune response of rat colon cells to cancer and vaccination with anti-p53 polyclonal antibodies. *Anticancer Res.* 17:4653-4658.
- (162) Cohen I, **Nyska A**, Chechick A, Rzetely V, Bogin E (1997). The effect of single limb immobilization on the epiphyseal growth-plate in the rat's proximal tibia. A histomorphometric study. *Lo Scalpello* 11:33-36.
- (163) Abdo K, Haseman J, **Nyska A** (1998). Isobutyraldehyde administered by inhalation (whole body exposure) for up to thirteen weeks or two years was a respiratory tract toxicant but was not carcinogenic in F344/N rats and B6C3F1 mice. *Toxicol. Sci.* 42:136-151.
- (164) Walach N, Lushkow G, **Nyska A**, Gur R, Pollack L, Schiffer J (1998). Effect of very high single dose of cisplatin and of radiation in the brain of a rabbit. *Neurol. Res.* 20:38-40.
- (165) Peano S, Conz A, Carbonatto M, Goldstein J, **Nyska A** (1998). Atrio caval mesothelioma in a male Sprague-Dawley (SD) rat. *Toxicol. Pathol.* 26:695-698.
- (166) Reifen R, **Nyska A**, Koperstein L, Zusman I (1998) Intestinal and hepatic cell kinetics and mucous changes in vitamin-A deficient rats. *Int. J. Mol. Med.* 1:579-582.

- (167) Dayan D, Kozlovski A, Tal H, Kariv N, Shemesh M, **Nyska A** (1998). Castration prevents calcium channel blocker-induced gingival hyperplasia in beagle dogs. *Hum. Exp. Toxicol.* 17:396-402.
- (168) Wormser U, Brodsky B, Moor EV, Eldad A, Gal R, **Nyska A**, Kohen R (1998). Skin surface proteolytic activity. Partial characterization and identification. *Adv. Exp. Med. Biol.* 436:207-212
- (169) Koren R, Perl S, Zajdel L, Paz A, Oberkleid OE, **Nyska A**, Gal R (1998). Mucinous metaplasia in dogs prostate and its anatomical distribution. *Rev. Med. Vet.* 149:313-318.
- (170) **Nyska A**, Herbert RA, Chan PC, Haseman JH, Hailey JR (1998) Theophylline-induced mesenteric periarteritis in F344/N rats. *Arch. Tox.* 72:731-737.
- (171) Yeruham I, **Nyska A** (1998). Acral lick dermatitis in a jackal (*Canis aureus*). *J. Zoo. Wildl. Med.* 29:233.
- (172) Hailey RJ, Haseman JK, Bucher JR, Radovsky AE, Malarkey DE, Miller RT, **Nyska A**, Maronpot RR (1998). Impact of *Helicobacter hepaticus* infection in B6C3F1 mice from twelve National Toxicology Program two-year carcinogenesis studies. *Toxicol. Pathol.* 26:602-611.
- (173) Wormser U, Rabinstein I, Kritzler JS, **Nyska A** (1998). Assessment of exposure to environmental neurotoxins--a new approach. *Pharmacol. Toxicol. Methods* 39:241-243.
- (174) **Nyska A**, Maronpot RR, Long PH, Hailey RJ, Travlos GS, Roycroft JH, Ghanayem BI (1998). Disseminated thrombosis in rats following inhalation exposure to 2-butoxyethanol. *Toxicol. Pathol.* 27:287-294.
- (175) Teomim D, **Nyska A**, Domb AJ (1999). Ricinoleic acid based biopolymers. *J. Biomed.Mater. Res.* 45:258-267.
- (176) Sintov A, Ze'evi A, Uzan R, **Nyska A** (1999). Influence of pharmaceutical gel vehicles containing oleic acid/sodium oleate combinations on hairless mouse skin – histological evaluation. *Eur. J. Pharm. Biopharm.* 142:328-337.
- (177) **Nyska A**, Haseman JK, Hailey JR, Smetana S, Maronpot RR (1999). The association between severe nephropathy and pheochromocytoma in the male F344 rat - the National Toxicology Program experience. *Toxicol. Pathol.* 27:456-462.
- (178) **Nyska A**, Maronpot RR, Ghanayem BI (1999). Ocular thrombosis and retinal degeneration induced in female F344 rats by 2-butoxyethanol. *Hum. Exp. Toxicol.* 18:577-582.
- (179) Huff J, Waalkes M, **Nyska A**, Chan P (1999). Apoptosis and growth inhibition in malignant lymphocytes after treatment with arsenic trioxide at clinically achievable concentrations (A Letter). *J. Natl. Cancer Inst.* 91:1690-1691.
- (180) Pollack A, Oren P, Stark A, Eisner Z, **Nyska A**, Madar Z (1999). Cataract development in sand and galactosemic rats fed a natural tomato extract. *J. Agr. Food Chem.* 47:5122-5126.
- (181) Cohen I, **Nyska A**, Givon U, Chechick A, Rzetelny V, Bogin E (1999). Microscopic alterations in the physis of long bones in response to hind limb immobilization in the rat. **Isr. Med. Assoc. J.** 3:161-164.
- (182) Lomnitski L, **Nyska A**, Shohami E, Chen Y, Michaelson DM (2000). Increased levels of intracellular iron in the brains of ApoE-deficient mice with closed head injury. *Exp. Toxicol. Pathol.* 52:177-183.

- (183) Huff J, Chan P, **Nyska A** (2000). Is the human carcinogen arsenic carcinogenic to laboratory animals? *Toxicol. Sci.* 55:17-23.
- (184) Long PH, Maronpot RR, Ghanayem BI, Roycroft JH, **Nyska A** (2000). Dental pulp infarction in female rats following inhalation exposure to 2-butoxyethanol. *Toxicol. Pathol.* 28:246-252.
- (185) Lomnitski L, **Nyska A**, Ben-Shaul B, Maronpot RR, Haseman JK, Levin Harrus T, Bergman M, Grossman S (2000). Effects of antioxidants apocynin and natural water-soluble antioxidant, NAO, on cellular damage induced by LPS in the rat. *Toxicol. Pathol.* 28:580-587.
- (186) Ghanayem BI, Ward SM, Chanas B, **Nyska A** (2000). Comparison of acute hematotoxicity of 2-butoxyethanol in male and female F344 rats. *Hum. Exp. Toxicol.* 19:185-192.
- (187) Lomnitski L, Carbonatto M, Ben-Shaul V, Peano S, Conz A, Corradin L, Maronpot RR, Grossman S, **Nyska A** (2000). The prophylactic effects of natural antioxidants, NAO and apocynin, in rabbit model of LPS-induced endotoxemia. *Toxicol. Pathol.* 28:588-600.
- (188) Eilat E, Zinger H, **Nyska A**, Mozes E (2000). Prevention of systemic lupus erythematosus-like disease in (NZBXNZW)F1 mice by treating with CDR1 and CDR3 based peptides of pathogenic antibody. *J. Clin. Immunol.* 20:268-278.
- (189) Lomnitski L, Foley J, Grossman S, Ben Shaul V, Maronpot RR, Moomaw C, Carbonatto M, **Nyska A** (2000). Effect of the natural antioxidants, apocynin and NAO, on iNOS and COX-2 induction in LPS-induced hepatic injury in rat. *Pharmacol. Toxicol.* 87:18-25.
- (190) Dvir I, Chayoth R, Sod-Moriah U, Shany S, **Nyska A**, Stark A, Madar Z, Arad S (2000). Soluble polysaccharide and biomass of red Microalga porphyridium sp alter intestinal morphology and reduce serum cholesterol in rats. *Br. J. Nutr.* 84:469-476.
- (191) Wormser U, Sintov A, Brodsky B, **Nyska A** (2000). Topical iodine preparation as therapy against sulfur mustard-induced skin lesions. *Toxicol. Appl. Pharmacol.* 169:33-39.
- (192) Wormser U, Brodsky B, Green BS, Arad-Yellin R, **Nyska A** (2000). Protective effect of povidone iodine ointment against skin lesions induced by chemical and thermal stimuli. *J. Appl. Toxicol.* 20 Suppl 1:S183-185.
- (193) **Nyska A**, Lomnitski L, Maronpot RR, Moomaw C, Brodsky B, Sintov A, Wormser U (2000). Effects of iodine on inducible nitric oxide synthase and cyclooxygenase-2 expression in sulfur mustard-induced skin injury in guinea pigs. *Arch. Toxicol.* 74:768-774.
- (194) Sabo T, Lomnitski L, **Nyska A**, Beni S, Maronpot RR, Shohami E, Roses AD, Michaelson AD (2000). The susceptibility of transgenic mice expressing human apolipoprotein E to closed head injury: The allele E3 is neuroprotective whereas E4 increases fatalities. *Neuroscience* 101:879-884.
- (195) Ben-Shaul V, Lomnitski L, **Nyska A**, Carbonatto M, Peano S, Zurovsky Y, Bergman M, Eldridge SR, Grossman S (2000). Effects of natural antioxidants, NAO and apocynin, on lipid peroxidation products and antioxidative enzymes in rabbit model of LPS-induced endotoxemia. *Hum. Exp. Toxicol.* 19:604-614.
- (196) Ghanayem BI, Long PI, Ward SM, Chanas B, Nyska M, **Nyska A** (2001). Hemolytic anemia, thrombosis, and infarction in male and female F344 rats following gavage exposure to 2-butoxyethanol. *Exp. Toxicol. Pathol.* 53:97-105.

(197) Ozaki K, Mahler JF, Haseman JK, Moomaw CR, Nicolette ML, **Nyska A** (2001). Unique renal tubule changes induced in rats and mice by peroxisome proliferators 2,4 dichlorophenoxyacetic acid (2,4-D) and WY-14643. *Toxicol. Pathol.* 29:440-450.

(198) Suwa S, **Nyska A**, Peckham JC, Hailey JR, Mahler JF, Haseman JK, Maronpot RR (2001). A retrospective analysis of background lesions and tissue accountability for male accessory sex organs in Fischer-344 rats. *Toxicol. Pathol.* 29:467-478.

(199) **Nyska A**, Lomnitski L, Spalding J, Dunson DB, Goldsworthy TL, Grossman S, Bergman M, Boorman G (2001). Topical and oral administration of the natural water-soluble antioxidant from spinach reduces the multiplicity of papillomas in the Tg.AC mouse model. *Toxicol. Lett.* 122:33-44.

(200) Nold J, Keenan K, Cartwright M, **Nyska A** (2001). Society of Toxicologic Pathology position paper: diet as a variable in rodent toxicology and carcinogenicity studies. *Toxicol. Pathol.* 29:585-586.

(201) Breitbart E, Lomnitski L, **Nyska A**, Malik A, Bergman M, Sofer Y, Haseman JK, Grossman S (2001). Effects of water-soluble antioxidant from spinach, NAO, on doxorubicin-induced heart injury. *Hum. Exp. Toxicol.* 20:337-345.

(202) Ben-Shaul V, Lomnitski L, **Nyska A**, Zurovsky Y, Bergman M, Grossman S (2001). The effect of natural antioxidants NAO and apocynin on oxidative stress in rat heart following LPS challenge. *Toxicol. Lett.* 123:1-10.

(203) Gottschling BC, Maronpot RR, Hailey JR, Peddada S, Moomaw CR, Klaunig JE, **Nyska A** (2001). The role of oxidative stress in indium phosphide-induced lung carcinogenesis in rats. *Toxicol. Sci.* 64:28-40 [Selected as "Toxicological Highlight" and discussed in: Upham BL, Wagner JG (2001). Toxicant-induced oxidative stress in cancer. *Toxicol. Sci.* 64:1-3].

(204) **Nyska A**, Moomaw CR, Lomnitski L, Chan PC (2001). Glutathione S-transferase Pi (GST-Pi) expression in forestomach carcinogenesis process induced by gavage-administered 2,4-hexadienal in the F344 rat. *Arch. Toxicol.* 75:618-624.

(205) Suwa T, **Nyska A**, Haseman JK, Mahler JF, Maronpot RR (2001). Spontaneous lesions in control B6C3F₁ mice and recommended sectioning of male accessory sex organs. *Toxicol. Pathol.* 30:228-234.

(206) Ozaki K, Haseman JK, Hailey JE, Maronpot RR, **Nyska A** (2001). Association of adrenal pheochromocytoma and lung pathology in inhalation studies with particulate compounds in the male F344 rat - The National Toxicology Program experience. *Toxicol. Pathol.* 30:263-270.

(207) **Nyska A**, Nold JN, Johnson JD, Abdo D (2002). Lysosomal-storage disorder induced by elmiron following 90-days gavage administration in rats and mice. *Toxicol. Pathol.* 30:178-187.

(208) **Nyska A**, Dayan A, Maronpot RR (2002). New tools in therapeutic research--prostatic cancer and models. *Toxicol. Pathol.* 30:283-287.

(209) Ghanayem BJ, **Nyska A**, Haseman JK, Bucher J (2002). Acrylonitrile is multi-site carcinogen in male and female B6C3F₁ mice. *Toxicol. Sci.* 68:59-68.

(210) Moyer CF, Kodavanti UP, Haseman JK, Maronpot RR, Costa DL, **Nyska A** (2002). Systemic vascular disease in male B6C3F₁ mice exposed to particulate matter by inhalation: studies conducted by the National Toxicology Program. *Toxicol. Pathol.* 30(4):427-434.

(211) Wormser U, Sintov A, Brodsky B, Amitai Y, **Nyska A** (2002). Protective effect of topical iodine preparations upon heat- and hydrofluoric acid-induced skin lesions. *Toxicol. Pathol.* 30:552-558.

- (212) Blood-Siegfried J, **Nyska A**, Lieder H, Moe J, Vega L, Patterson R, Germolec D (2002). Synergistic effect of influenza A virus on endotoxin induced mortality in rat pups: A potential model for sudden infant death syndrome. *Pediatr. Res.* 52:481-490.
- (213) Bonner JC, Rice AB, Ingram JL, Moomaw CR, **Nyska A**, Bradbury A, Sessoms AR, Chlada PC, Morgan DL, Zeldin DC, Langenbach R (2002). Susceptibility of cyclooxygenase(COX)-2 deficient mice to pulmonary fibrogenesis. *Am. J. Pathol.* 161:459-470.
- (214) Seely JC, Haseman JK, **Nyska A**, Wolf DC, Everitt JI, Hailey JR (2002). The effect of chronic progressive nephropathy on the incidence of renal tubule cell neoplasms in the F344 rat. *Toxicol. Pathol.* 31:681-686.
- (215) **Nyska A**, Moomaw CR, Foley JF, Maronpot RR, Malarkey DE, Cummings CM, Peddada S, Moyer CF, Allen DG, Travlos G, Chan PC (2002). The hepatic endothelial carcinogen riddelliine induces endothelial apoptosis, mitosis, S phase, and p53 and hepatocytic vascular endothelial-growth-factor expression after short-term exposure. *Toxicol. App. Pharmacol.* 184:153-164.
- (216) Kohen R, **Nyska A** (2002). Oxidation of biological systems: oxidative stress phenomena, antioxidants, redox reactions, and methods for their quantification. *Toxicol. Pathol.* 31:620-650.
- (217) Suttie A, **Nyska A**, Haseman JK, Moser G, Hackett TR, Goldsworthy T (2003). A grading scheme for the assessment of proliferative lesions in the mouse prostate in the TRAMP model. *Toxicol. Pathol.* 31:39-51.
- (218) **Nyska A**, Suttie A, Bakashi S, Lomnitski L, Grossman S, Bergman M, Ben Shaul V, Crockett P, Haseman JK, Moser G, Goldsworthy T, Maronpot RR (2003). Slowing tumorigenic progression in TRAMP mice and prostatic carcinoma cell lines using natural antioxidant from spinach, NAO—a comparative study of three antioxidants. *Toxicol. Pathol.* 31:31-38.
- (219) **Nyska A**, Hester SD, Cooper RL, Goldman JM, Stocker TE, House D, Wolf DC (2003). Single or group housing altered hormonal physiology and affected pituitary and interstitial cell kinetics. *Jap. J. Tox. Sci.* 27:449-457.
- (220) Ezov N, Levin-Harrus T, Mittelman M, Redlich M, Shabat S, Ward SM, Peddada S, Nyska M, Yedgar S, **Nyska A** (2002). Chemically induced rat model of hemolysis with disseminated thrombosis. *Cardiovasc. Toxicol.* 2:181-194.
- (221) Kodavanti UP, Moyer C, Ledbetter AD, Schladweiler MC, Costa DL, Hauser R, Christiani DC, **Nyska A** (2003). Inhaled environmental combustion particles cause myocardial injury in the Wistar Kyoto rat. *Toxicol. Sci.* 71:237-245.
- (222) **Nyska A**, Ghanayem BI (2003). Characterization of the toxicity, mutagenicity, and carcinogenicity of ethacrylonitrile in F344 rats and B6C3F1 mice. *Arch. Toxicol.* 77:233-242.
- (223) Sobol RW, Foley JF, **Nyska A**, Davidson MG, Wilson SH (2003). DNA β polymerase expression imbalance mediates early onset cataract in mice. *DNA Repair* 2:609-622.
- (224) **Nyska A**, Glovinsky Y, Belkin M, Epstein Y (2003). Biocompatibility of the Ex-PRESS miniature glaucoma drainage implant. *J. Glaucoma* 12:275-280.
- (225) Koshkaryev A, Barshtein G, **Nyska A**, Ezov N, Levin-Harrus T, Shabat S, Nyska M, Redlich M, Yedgar S (2003). 2-Butoxyethanol enhances the adherence of red blood cells. *Arch. Toxicol.* 77:465-469.

- (226) Abdo KM, Johnson JD, **Nyska A** (2003). Toxicity and carcinogenicity of Elmiron® in F344/N rats and B6C3F1 mice following 2-years of gavage administration. *Arch. Toxicol.* 77:702-711.
- (227) Jokinen MP, Walker NJ, Brix AE, Sells DM, Haseman JK, **Nyska A** (2003). Cardiovascular pathology in female Sprague-Dawley rats following chronic treatment with dioxin-like compounds. *Cardiovasc. Toxicol.* 3: 99-310.
- (228) Reifen R, Mor A, **Nyska A** (2004). Vitamin A deficiency aggravates rotavirus infection in CD-1 mice through extensive involvement of the gut. *Int. J. Vitam. Nutr. Res.* 74:355-361.
- (229) Chan PC, Mahler J, Peddada S, Lomnitski L, **Nyska A** (2003). Forestomach tumor induction by 2,4-hexadienal in F344/N rats and B6C3F1 mice. *Arch. Toxicol.* 77:511-520.
- (230) Kim AH, Kohn MC, **Nyska A**, Walker NJ (2003). Area-under-the-curve (AUC) as a dose metric for promotional responses following 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure. *Toxicol. Appl. Pharmacol.* 191:12-21.
- (231) Lomnitski L, Bergman M, **Nyska A**, Ben Shaul V, Grossman S (2003). Composition, efficacy, and safety of spinach Antioxidants. *Nutr. Cancer* 46:222-231.
- (232) Chan PC, Haseman JK, **Nyska A** (2003). Toxicity and carcinogenicity of riddelliine in rats and mice. *Toxicol. Lett.* 144:295-311.
- (233) **Nyska A**, Moomaw CR, Ezov N, Shabat S, Levin-Harrus T, Nyska N, Redlich M, Mittelman M, Yedgar S, Foley JF (2003). Ocular expression of vascular cell adhesion molecule (VCAM-1) in 2-butoxyethanol-induced hemolysis and thrombosis in female rats. *Exp. Toxicol. Pathol.* 55:231-236.
- (234) Kodavanti UP, Moyer C, Ledbetter AD, Schladweiler MC, Costa DL, Hauser R, Christiani DC, **Nyska A** (2003). Letter to the Editor, Inhaled environmental combustion particles cause myocardial injury in the Wistar Kyoto rat. *Toxicol. Sci.* 74:228-229.
- (235) Hill G, Pace V, Persohn E, Bresser C, Haseman J, Tischler A, **Nyska A**. (2003). A comparative immunohistochemical study of spontaneous and chemically induced pheochromocytomas in B6C3F1 mice. *Endocr. Pathol.* 14:81-92.
- (236) Haseman JK, Ney E, **Nyska A**, Rao GN (2003). Effect of diet and animal care/housing protocols on body weight, survival, tumor incidences, and nephropathy severity of F344 rats in chronic studies. *Toxicol. Pathol.* 31:674-681.
- (237) Shabat S, A. **Nyska A**, P. H. Long PH, Goelman G, Abramovitch R, Ezov, T. Levin-Harus T, S. Peddada S, Redlich M, Yedgar S, Nyska M (2003). Osteonecrosis in a chemically induced rat model of human hemolytic disorders associated with thrombosis – A new model for avascular necrosis of bone. *Calcif. Tissue Int.* 74:220-228.
- (238) Long PH, Herbert RA, **Nyska A** (2003). Hexachlorobenzene-induced incisor degeneration in Sprague-Dawley rats. *Toxicol. Pathol.* 32:35-40.
- (239) Lomnitski L, Elizabeth Padilla-Banka E, Jefferson WN, **Nyska A**, Grossman S, Newbold RR (2003) Lack of estrogenic or antiestrogenic activity of the spinach antioxidants mixture, NAO. *J. Nutr.* 133:3584-3587.
- (240) Wormser U, Sintov A, Brodsky B, Casillas RP, **Nyska A** (2004). Protective effect of topical iodine containing anti-inflammatory drugs against sulfur mustard-induced skin lesions. *Arch. Toxicol.* 78:156-66.

(241) Shikanov A, Krasko MY, Waisman B, **Nyska A**, Domb AJ (2004). Poly(sebacic acid-co-ricinoleic acid) biodegradable carrier for paclitaxel – in vitro release – in vivo toxicity. *J. Biomater. Med. Res.* A 69:47-54.

(242) Tani Y, Maronpot RR, Foley JF, Haseman JK, Walker NJ, **Nyska A** (2004). Follicular epithelial cell hypertrophy induced by chronic oral administration of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in female Harlan Sprague-Dawley Rats. *Toxicol. Pathol.* 32:41-49.

(243) Rhodes MC, **Nyska A**, Seidler FJ, Slotkin TA (2003). Does terbutaline damage the developing heart? *Dev. Reprod. Toxicol.* 68:449-55.

(244) **Nyska A**, Haseman JK, Kohen R, Maronpot RR (2004). Association of liver hemangiosarcoma and secondary iron overload in B6C3F1 mice – The National Toxicology Program experience. *Toxicol. Pathol.* 32:222-228.

(245) Rhodes MC, Seidler FJ, Abdel-Rahman A, Tate CA, **Nyska A**, Rincavage HK, Slotkin TA (2004). Terbutaline is a developmental neurotoxicant: effects on neuroproteins and morphology in cerebellum, hippocampus, and somatosensory cortex. *J. Pharmacol. Exp. Ther.* 308:529-537.

(246) **Nyska A**, Cumming CA, Vainshtein, Nadler J, Ezov N, Grunfeld Y, Gileadi O, Behar V (2004). Electron microscopy of wet tissues: new imaging capabilities for renal pathology. *Toxicol. Pathol.* 32:357-363.

(247) Germolec D, **Nyska A**, Kashon M, Kupfer CF, Portier C, Kommineni C, Johnson KA, Luster MI (2004). Extended histopathology in immunotoxicity testing. Interlaboratory validation studies. *Toxicol. Sci.* 78:107-115.

(248) Redlich M, Maly A, Aframian D, Shabat S, Ezov N, Levin Harrus T, Nyska M, **Nyska A**. (2004). Histopathological changes in dental and oral soft tissues in 2-butoxyethanol-induced hemolysis and thrombosis in rats. *J. Oral Pathol. Med.* 33:424-429.

(249) Dunnick JK, Lieuallen W, Moyer C, Orzech D, **Nyska A** (2004). Cardiac damage in rodents after exposure to bis(2-chloroethoxy)methane. *Toxicol. Pathol.* 32:309-317.

(250) Moyer C, Allen D, A. Basae A, Maronpot RR, **Nyska A** (2004). Analysis of vascular endothelial growth factor (VEGF) and a receptor subtype (KDR/flk-1) in the liver of rats exposed to riddelliine: a potential role in the development of hemangiosarcoma. *Exp. Toxicol. Pathol.* 55:455-465.

(251) Brix AE, Jokinen MP, Walker NJ, Sells DM, **Nyska A** (2004). Characterization of bronchiolar metaplasia in rats exposed to 3,3',4,4',5-pentachlorobiphenyl (PCB 126). *Toxicol. Pathol.* 32:333-337.

(252) **Nyska A**, Jokinen MP, Brix AE, Sells DM, Wyde ME, Orzech D, Haseman JK, Flake G, Walker NJ (2004). Exocrine pancreatic pathology in female Harlan Sprague-Dawley rats after chronic treatment with 2,3,7,8-tetrachlorodibenzo-*p*-dioxin and dioxin-like compounds. *Environ. Health Perspect.* 112:903-909.

(253) Kadiiska MB, Gladen BC, Baird DD, Germolec D, Graham LB, Parker CE, **Nyska A**, Wachsman JT, Ames BA (2005). Biomarkers of oxidative stress study. II. Are oxidation products of lipids, proteins and DNA markers in CCl₄ poisoning? *Free Rad. Biol. Med.* 38(6):698-710

(253) Couse JF, Yates MM, Sanford R, **Nyska A**, Nilson JH, Korach KS (2004). Formation of cytic ovarian follicles associated with elevated luteinizing hormone requires estrogen receptor-*B*. *Endocrinology* 145:4693-4702.

(254) Smith M, **Nyska A**, Portier C (2004). Application of a statistical dynamic model investigating the short-term cellular kinetics induced by riddelliine, a hepatic endothelial carcinogen. *Toxicol. Sci.* 80:258-267.

(255) Falk R, Hacham M, **Nyska A**, Foley J, Polacheck I (2005). Induction of IL-1 β , TNF- α , and apoptosis in mouse organs by Amphotericin B is neutralized by conjugation with arabinogalactan. *Antimicrobial Agents and Chemotherapy* (in press).

(256) Wormser U, Langenbach R, Peddada S, Sintov A, Brodsky B, **Nyska A** (2004). Reduced sulfur mustard-induced skin toxicity in cyclooxygenase-2 knockout and celecoxib-treated mice. *Toxicol. Appl. Pharmacol.* 200:40-47.

(257) Bishop JB, Tani, Y, Witt K, Johnson JA, Peddada S, Dunnick J, **Nyska A** (2004). Mitochondrial damage revealed by morphometric and semiquantitative analysis of mouse pup cardiomyocytes following *in utero* and postnatal exposure to zidovudine and lamivudine. *Toxicol. Sci.* 81:512-517.

(258) Shtrasburg S, Gal R, MD, Gruys E, DVM, Perl S, MD, Martin BM, Kaplan B, Koren R, **Nyska A**, Pras M, MD, Livneh A (2005). An ancillary tool for the diagnosis of AA amyloidosis in a variety of domestic and wild animals. *Vet. Pathol.* 42:132-139.

(259) Dunnick J, Johnson JA, Horton J, **Nyska A**. (2004). Bis(2-chloroethoxy)methane-induced mitochondrial and myofibrillar damage: short-term time-course study. *Toxicol. Sci.* 81:243-52.

(260) Walker NJ, Crockett P, Yin M, **Nyska A**, Brix A, Jokinen MP, Sells DM, Hailey RJ, Haseman JK, Wyde ME, Bucher JR, Portier CJ (2005). Dose-additive carcinogenicity of a defined mixture of "dioxin-like compounds." *Environ. Health Perspect.* 113:43-48.

(261) Irwin RD, **Nyska A**, Prejean JD, Roycroft J (2004). The naturally occurring anthraquinone emodin is a renal toxicant but not a carcinogen. *Int. J. Toxicol.* (in press).

(262) Germolec D, Kashon M, **Nyska A**, Kupfer CF, Portier C, Kommineni C, Johnson KA, Luster MI (2004). The accuracy of extended histopathology to detect immunotoxic chemicals. *Toxicol. Sci.* 78:107-115.

(263) Hailey JR, Walker NJ, Sells DM, Brix AE, Jokinen MP, **Nyska A** (2005). Classification of proliferative hepatocellular lesions in Harlan Sprague-Dawley rats chronically exposed to dioxin-like compounds. *Toxicol. Pathol.* 33:165-74.

(264) Ribeiro-Neto F, Leon A, Urbani-Brocard J, Lou L, **Nyska A**, Altschuler DL (2004). cAMP-dependent oncogenic action of Rap1b in the thyroid gland. *J. Biol. Chem.* 279:46868-46875.

(265) Tani Y, Suttie A, Flake G, **Nyska A**, Maronpot R (2004). Epithelial-stromal tumor of the seminal vesicles in the transgenic adenocarcinoma mouse prostate (TRAMP) model. *Vet. Pathol.* (in press).

(266) Nyska M, Shabat S, Long PH, Howard C, Ezov N, Levin-Harrus T, Mittelman M, Redlich M, Yedgar S, **Nyska A** (2005). Disseminated thrombosis-induced growth plate necrosis in rat – a unique model for growth plate arrest. *J. Pediatr. Orthop.* 25:346-50.

(267) Yoshizawa K, Walker NJ, Jokinen MP, Brix AE, Sells DM, Tiwanda M, Wyde ME, Orzech D, Haseman JK, **Nyska A** (2005). Gingival carcinogenicity in female Harlan Sprague-Dawley rats after oral treatment for two years with TCDD and dioxin-like compounds. *Toxicol. Sci.* 83:64-77.

(268) **Nyska A**, Murphy E, Foley JF, Collins BJ, Petranka J, Howden R, Hanlon P, Dunnick JK (2005). Acute hemorrhagic myocardial necrosis and sudden death of rats exposed to a combination of ephedrine and caffeine. *Toxicol. Sci.* 83:388-396.

(269) Howden R, Petranka J, Hanlon P, Kleeberger S, Bucher J, Dunnick J, **Nyska A**, Murphy E (2005). Ephedrine plus caffeine causes age-dependant cardiovascular responses in Fischer 344 rats. *Am. J. Physiol.* 288:H2219-24.

(270) Jokinen MP, Lieuallen WG, Johnson CL, **Nyska A** (2005). Morphology of chemical-induced pathologic myocardial change and its relationship to possible mechanisms of cardiotoxicity.– The National Toxicology Program experience. *Cardiovasc. Toxicol.* 5:227-244.

(271) **Nyska A**, Lewis DN, Johnson K, Malarkey D, Ward S, Streiker M, Shabat S, Peddada S, Nyska M (2005). 2-Butoxyethanol female-rat model of hemolysis and disseminated thrombosis: X-ray characterization of osteonecrosis and growth-plate suppression. *Toxicol. Pathol.* 33:272-282.

(272) Tani Y, Foster PM, Sills RC, Maronpot RR, **Nyska A** (2005). Epididymal sperm granuloma induced by chronic administration of 2-methylimidazole in B6C3F₁ mice. *Toxicol. Pathol.* 33:313-319.

(273) **Nyska A**, Yoshizawa K, Jokinen MP, Brix AE, Sells DM, Wyde ME, Orzech D, Kissling GE Walker NJ (2005). Olfactory epithelial metaplasia and hyperplasia in female Harlan Sprague-Dawley rats following chronic treatment with mixtures of dioxin-like compounds. *Toxicol. Pathol.* 33:371-377.

(274) Suttie A, Dinse GE, **Nyska A**, Moser GJ, Goldsworthy TL, Maronpot R (2005). An investigation of the effects of late-onset dietary restriction on prostate cancer development in the Tramp mouse. *Toxicol. Pathol.* 33: 386-397.

(275) Yoshizawa K, Marsh T, Foley JF, Cai B, Peddada S, Walker NJ, **Nyska A** (2005). Mechanisms of exocrine pancreatic toxicity induced by oral treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin in female Harlan Sprague-Dawley rats. *Toxicol. Sci.* 85:594-606.

(276) Yoshizawa K, Kissling GE, Johnson JA, Clayton NP, Flagler ND, **Nyska A** (2005). Chemical-induced atrial thrombosis in NTP rodent studies: potential mechanisms and literature review. *Toxicol. Pathol.* 33: 517-32.

(277) Walters D, Bonner J, Rice A, Manning B, Kleeberger S, **Nyska A**, Tani Y, Ingram J (2004). Susceptibility of signal transducer and activator of transcription-1-deficient mice to pulmonary fibrogenesis. *American Journal of Pathology.* 167:1221-9.

(278) Wormser W, Brodsky B, Proscura E, Foley JF, Jones T, **Nyska A** (2005). Involvement of Tumor Necrosis Factor-alpha in Sulfur Mustard-Induced Skin Lesion; Effect of Topical Iodine. *Archives of Toxicology* 79:660-70.

(279) Brix, AE, **Nyska A**, Haseman JK, Sells DM, Jokinen MP, Walker NJ (2005). Incidences of Selected Lesions in Control Female Harlan Sprague-Dawley Rats from Two-year Studies Performed by the National Toxicology Program. *Toxicol. Pathol.* 33: 477-83.

(280) Yoshizawa K, Oishi Y, Matsumoto M, **Nyska A** (2005). Ischemic brain damage after ketamine and xylazine treatment in a young laboratory monkey (*Macaca fascicularis*). *Contemporary Topics in Laboratory Animal.* 44; 19-24.

- (281) Haley P, Perry R, Ennulat D, Frame S, Johnson C, Lapointe JM, **Nyska A**, Perry, Snyder P, Walker D, Walter G (2005). Best Practice Guideline for the Routine Pathology Evaluation of the Immune System (STP Immunotoxicology Working Group). *Toxicol. Pathol.* 33: 386-397.
- (282) Gilmour, P. S., **Nyska, A.**, Schladweiler M. C., Ledbetter, A. D., McGee, J. K., Costa, D. L., Richards J. H., and Kodavanti, U. P. 2006. Cardiovascular and blood coagulation effects of pulmonary zinc exposure. *Toxicol. Appl. Pharmacol.* 211;41-52.
- (283) Ben-Shabat S, Elmalak O, **Nyska A**, Domb AJ (2005). Degradable Copolyesters and Copolyanhydrides as Drug Carriers. Biodegradable Polymers. *Israel Journal of Chemistry* (45: in press).
- (284) Tam NNC, **Nyska A**, Maronpot RR, Kissling G, Lomnitski L, Suttie A, Bakshi S, Bergman M, Grossman S, Ho SM (2005). Differential Attenuation of Oxidative/Nitrosative Injuries in Early Prostatic Neoplastic Lesions in TRAMP Mice by Dietary Antioxidants. *Prostate* 66; 57-69
- (285) Zheng C, Voutetakis A, Kok MR, Goldsmith CM, Smith GBJ, Elmore S, **Nyska A**, Vllant M, Irwin RD, Baum BJ (2005). Toxicity and biodistribution of a first-generation recombinant adenoviral vector, in the presence of hydroxychloroquine, following retroductal delivery to a single rat submandibular gland. *Oral Diseases* 12; 137-44.
- (286) Chan P, Mahler J, Travlos T, Wenk M, Nyska A (2005). Induction of thyroid lesions in 14-week toxicity studies of 2- and 4-methylimidazole in Fischer 344/N rats and B6C3F1 mice. *Archives of Toxicology* 80:169-180.
- (287) Gilmour PS, Schladweiler MC, Wallenborn G, **Nyska A**, McGee JK, Thomas R, Jaskot RH, Schmidt J, Kodavanti UP (2006) Systemic imbalance of essential metals and cardiac gene expression in rats following acute pulmonary zinc exposure *J Toxicol Environ Health.* 69: 1-22.
- (288) Brodsky B, Trivedi S, Peddada S, Flagler N, Wormser U, **Nyska A** (2005). Early effects of iodine on DNA synthesis in sulfur mustard-induced skin lesions. *Archives of Toxicology* 27;1-5
- (289) Chan SSL, Santos JH, Meyer JN, Mandavilli BS, Cook, DL, Jr., McCash CL, Kissling GE, **Nyska A**, Foley JF, Houten BV, Copeland WC, Walker VE, Witt KL, Bishop JB (2007). Mitochondrial toxicity in cardiomyocytes of CD-1 mice following perinatal exposure to AZT, 3TC, or AZT/3TC in combination. *Environ Mol Mutagen.* 48; 190-200
- (290) Lewis DA, **Nyska A**, Potti A, Hoke HA, Klemp KF, Ward, Peddada SD, Wu J, Ortel TL (2006). Hemostatic Activation in a Chemically Induced Rat Model of Severe Hemolysis and Thrombosis. *Thrombosis Research* 118:747-756.
- (291) Yoshizawa K, Matsumoto M, Oishi Y, **Nyska A** (2006). Extraskelatal osteosarcoma (cystic appearance) in an aged Sprague-Dawley rat. *Toxicol. Pathol.* 33:760-3
- (292) **Nyska A**, Horowitz M, Anaby D, Sabban A, Leizerman I, Blaugrund E, Mayk A, Behar V (2006). A New Method of Wet Scanning Electron Microscopy for the Analysis of myelination in EAE Mouse Model of Multiple Sclerosis Experimental and Toxicologic Pathology. 57:291-7.
- (293) Arnold LL, Eldan M, **Nyska A**, van Gemert M, Cohen SM (2006). Dimethylarsinic acid: results of chronic toxicity/oncogenicity studies in F344 rats and in B6C3F1 mice. *Toxicology.* 223: 82-100.
- (294) Dunnick J, Blackshear P, Kissling G, Cunningham M, Parker J, **Nyska A** (2006). Critical Pathways in Heart Function: Bis(2-chloroethoxy)methane-induced Heart Gene Transcript Change in F344 Rats. *Toxicol. Pathol.* 34: 348-356.

- (295) Elangbham CS, Wehe JG, Barton JC, Krull DL, **Nyska A**, Crabbs T, Kissling G (2007). Evaluation of Glycosaminoglycans Content and 5-Hydroxytryptamine 2B Receptor in Rat Heart Valves with Spontaneous Mitral Valvulopathy – A possible exacerbation by *dl*-amphetamine sulfate in Fischer 344 rats? *Exp. Toxicol. Pathol.* 58:89-99.
- (296) Walker NJ, Wyde ME, Fischer LJ, **Nyska A**, Bucher JR (2006). Comparison of chronic toxicity and carcinogenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in the two-year bioassays in female Sprague-Dawley rats conducted by the National Toxicology Program and the Dow Chemical Company. *Molecular Nutrition and Food Research.* 50:934-44.
- (297) Cabelof DC, Ikeno Y, **Nyska A**, Busuttil RA, Anyangwe N, Vijg J, Matherly LH, Tucker JD, Wilson SH, Richardson A, Heydari AR (2006). Heterozygous gene-targeted deletion of DNA polymerase β combined with aging increases risk of lymphoma and adenocarcinoma and alters age-related mortality. *Cancer Research*, 66:7460-5
- (298) Elmore S, Zheng C, Baum B, Irwin R, **Nyska A**, (2006). The Transduction Of Rat Submandibular Glands By An Adenoviral Vector Carrying The Human Growth Hormone Gene Is Associated with Limited and Reversible Changes at the Injection Site. *Toxicol. Pathol.* 34: 385-392.
- (299) Sells DM, Brix AE, **Nyska A**, Jokinen MP, Orzech DP, Walker NJ (2006). Respiratory Tract Lesions in Non-Inhalation Studies. *Toxicol. Pathol.* 35:170-7.
- (300) Clayton NP, Yoshizawa K, Kissling G, Burka LT, Chan PC, **Nyska A** (2006). Immunohistochemical Analysis of Expressions of Hepatic Cytochrome P450 in F344 Rats Following Oral Treatment with Kava Extract. *Exper. Exp. Toxicol. Pathol.* 58:223-236.
- (301) Ramot Y, **Nyska A** (2007). Drug induced thrombosis – experimental and clinical experience with mechanistic considerations. *Toxicol. Pathol.* 35:208-25.
- (302) Ramot Y, Lewis D, Ortel T, Streicker M, Moser G, Elmore S, Ward S, Peddada S, **Nyska A** (2007). Age and Dose Related Sensitivity in 2-Butoxyethanol F344 Rat Model of Hemolytic Anemia and Disseminated Thrombosis. *Exp. Toxicol. Pathol.* 58:311-22.
- (303) Wallenborn JC, Schladweiler MC, **Nyska A**, Johnson J, Thomas R, Jaskot RH, Richards JH, Ledbetter AD, Kodavanti U (2007). Cardiopulmonary Responses of Wistar Kyoto, Spontaneously Hypertensive and Stroke-Prone Rats to Particulate Matter (PM) Exposure. *Toxicology and Applied Pharmacology* 70:1912-22.
- (304) Speiser Z, Mayk A, Litinetski L, Fine T, **Nyska A**, Blaugrund E, Cohen S (2007). Rasagiline is neuroprotective in an experimental model of brain ischemia in the rat. *Journal of Neural Transmission* 114:595-605.
- (305) Krasko MY, Golenser J, **Nyska A**, Nyska M, Brin YS, Domb AJ (2006). Gentamicin extended release from an injectable polymeric implant. *Journal of Controlled Release.* 111:90-6.
- (306) Golomb E, Schneider, Houminer, Dunnick J, Kissling G, Borman, **Nyska A**, Schwalb H (2007). Occult Cardiotoxicity: Subtoxic dosage of Bis(2-chloroethoxy)methane impairs cardiac response to simulated ischemic injury. *Toxicol. Pathol.* 35:383-387.
- (307) Melnick RL, **Nyska A.**, Foster PM, Roycroft JH, Kissling GH (2007). Toxicity and Carcinogenicity of the Water Disinfection Byproduct, Dibromoacetic Acid, in Rats and Mice. *Toxicology.* 230:126-36.
- (308) Goldstein D, Gofrit O, **Nyska A**, Benita S (2007). Anti-HER2 cationic immunoemulsion as a potential targeted drug delivery system for the treatment of prostate cancer. *Cancer Research.* 269-75.

- (309) Elkahoul AG, Powers JF, **Nyska A**, Eisenhofer G, Tischler AS (2006). Gene expression profiling of rat pheochromocytoma, *Ann N Y Acad Sci* 1073:290-109.
- (310) Kristt D, **Nyska A** (2007) The wet Tissue SEM – a new Technology with Applications in Drug Development and Safety. *Japanese journal of Toxicologic Pathology J Toxicol Pathol* **20**; 1-11.
- (311) Dunnick JK, Kissling G, Gerken DK, Vallant MA, **Nyska A** (2007). Cardiotoxicity of Ma Huang/Caffeine or Ephedrine/Caffeine in a Rodent Model System. *Toxicologic Pathology* 35(5):657-64.
- (312) Yoshizawa K, Heatherly A, Malarkey D, Walker N, **Nyska A** (2007). A Critical Comparison of Rodent Pathological Effects and Epidemiological Data for Dioxins and PCBs. *Toxicologic Pathology* 35(7):865-79.
- (313) Chan PC, Hills GD, Kissling GE, **Nyska A** (2007). Toxicity and carcinogenicity studies of 4-methylimidazole. *Archives of Toxicology*. 82(1):45-53.
- (314) Wallenborn JC, Schladweiler MCJ, Ledbetter AD, **Nyska A**, Johnson JA, Thomas R, Jaskot R, Richards JH, Kodavanti UP (2007). Cardiopulmonary responses of Wistar Kyoto (WKY) and stroke prone spontaneously hypertensive rats (SHRSP) to particulate matter (PM) exposure. *Journal of Toxicology and Environmental Health*. 70(22):1912-22.
- (315) Kodavanti, U.P., Schladweiler, M.C., Gilmour, P.S., Wallenborn, J.G., Mandavilli, B.S., Ledbetter, A.D., Christiani, D.C., Runge, M.S., Karoly, E.D., Costa, D.L., Peddada, S., Jaskot, J., Richards, J.H., Thomas, R., Nageswara, M., **Nyska A**. (2008). <http://www.ncbi.nlm.nih.gov/pubmed/18197293?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.ResultsPanel.Pubmed.RVDocSum> The role of particulate matter-associated zinc in cardiac injury in rats. *Environ. Health Perspect.* 116(1):13-20
- (316) Okner O, Oron M, Tal N, **Nyska A.**, Kumar N., Mandler D, Domb AJ (2009). Electrocoating stainless steel coronary stents for extended release of paclitaxel. *Journal of Biomedical Materials Research: Part A*. 88:427-36.
- (317) Walker NJ, Yoshizawa K, Miller RA, Brix AE, Sells DM, Jokinen MP, Wyde ME, Easterling M, **Nyska A** (2007). Pulmonary Lesions in Female Harlan Sprague-Dawley Rats Following Two-Year Oral Treatment with Dioxin-like Compounds. *Toxicologic Pathology* 35(7):880-9.
- (318) Chan PC, Sills RC, Haseman JK, **Nyska A**, Richter W (2007) Induction of thyroid and liver tumors by chronic exposure to 2-Methylimidazole in F344/N Rats and B6C3F1 Mice. *Archives of Toxicology*. 82(6):399-412.
- (319) Ramot Y, Amir G, **Nyska A** (2008). Foreign Body Granulomas within Intramyocardial Arteries in a Transcoronary Safety Assessment in Pigs. *Toxicologic Pathology*. 36; 385-7.
- (320) Powers JF, Picard KL, **Nyska A**, Tischler AS (2008). Adrenergic Differentiation and Ret Expression in Rat Pheochromocytomas. *Endocrine Pathology*. 19(1):9-16
- (321) Blood-Siegfried J, Germolec D, **Nyska A**, Rambaud C (2008). Evidence for infection, inflammation and shock in sudden infant death parallels between a neo-rat model of sudden death and infants who died from SIDS. *Innate Immunity*. 14(3):145-52.
- (322) Nasser T, Rom , **Nyska A**, Benita S (2008). A novel nanocapsule delivery system approach to enhance intestinal transport and absorption of lipophilic P-glycoprotein substrate drugs. *Pharmaceutical Research*. 25(9):2019-29.

- (323) Dunnick J, **Nyska A** (2008). Characterization of Liver Toxicity in F344/N Rats and B6C3F1 mice after Exposure to a Flame Retardant containing lower molecular weight Polybrominated Diphenyl Ethers. *Experimental and Toxicologic Pathology* 61(1):1-12.
- (324) Brin YS, Golenser J, Mizrahi B, Maoz G, Domb AJ, Peddada S, Tuvia S, **Nyska A**, Nyska M (2009) Treatment of Osteomyelitis in Rats by Injection of Degradable Polymer releasing polymer Journal of Controlled Release. 131:121-7.
- (325) Wallenborn JG, Evansky P, Shannahan JH, Vallanat B, Ledbetter AD, Schladweiler MC, Richards JH, Gottipolu RR, **Nyska A**, Kodavanti UP (2009). Subchronic inhalation of zinc sulfate induces cardiac changes in healthy rats. *Toxicology and Applied Pharmacology*. 232:69-77.
- (326) Brin YS, **Nyska A**, Domb AJ, Golenser J, Mizrahi B, Krasko MY, Maoz G, Domb AJ, Nyska M (2009) Biocompatibility of a polymeric implant for the treatment of osteomyelitis. *Journal of Biomaterials Science: Polymer Edition* 20(7-8):1081-90
- (327) Shikanov S, Shikanov A, Gofrit O, **Nyska A**, Corn B, Domb AJ (2009). Intratumoral delivery of plaxitaxel for treatment of orthotopic prostate cancer. *Journal of Pharmaceutical Sciences*. 98(3):1005-14
- (328) Stout MD, **Nyska A**, Collins BJ, Witt KL, Kissling GE, Malarkey DE, Chhabra RS, Hooth MJ (2009). Toxicity and Carcinogenicity Studies of Chromium Picolinate Monohydrate Administered in Feed to F344/N Rats and B6C3F1 Mice for 2 years. *Food and Chemical Toxicology* 47(4):729-33.
- (329) Nasser T, Rom , **Nyska A**, Benita S (2009). Novel double coated nanocapsules for intestinal delivery and enhanced oral bioavailability of tacrolimus, a P-gp substrate drug. *Journal Controlled Release* 133(1):77-84.
- (330) Gordon CJ, Gottipolu RR, Kenyon EM, Thomas R, Schladweiler MC, Mack CM, Shannahan JH, Wallenborn JG, **Nyska A**, MacPhail RC, Richards JE, Devito M, Kodavanti UP. (2010). Aging and susceptibility to toluene in rats: a pharmacokinetic, biomarker, and physiological approach *J Toxicol Environ Health A*. 73:301-18.
- (331) Yudovin-Farber I, Beyth N, **Nyska A**, Weiss EI, Golenser J, Domb AJ (2008). Surface characterization and biocompatibility of the restorative resin containing nanoparticles. *Biomacromolecules* 9:3044-50.
- (332) Gottipolu RR, Wallemborn JG, Karoly ED, Schadweiler MC, Ledbetter AD, Krantz T, Linak WP, **Nyska A**, Johnson J, Thomas R, Richards JE, Jaskot RH, Kodavanti UP (2009). One-Month Diesel Exhaust Inhalation Produces Hypertensive Gene Expression Pattern in Healthy Rats. *Environmental Health Perspectives*. 117:38-46.
- (333) Vaisman B, Motiei M., **Nyska A**, Domb, A. (2010) Biocompatibility and safety evaluation of a ricinoleic acid-based poly(ester-anhydride) copolymer after implantation in rat. *Journal of Biomedical Materials Research: Part A*. 92(2):419-31.
- (334) Boudonck KJ, Mitchell MW, Shinar D, **Nyska A**, Moti Rosenstock (2009). Discovery of Metabolomics Biomarkers for Early Detection of nephrotoxicity. *Toxicologic Pathology* 37(3):280-92.
- (335) Ramot Y, Meiron M, Toren A, Steiner M, **Nyska A** (2009). Safety and Biodistribution Profile of Placental-derived Mesenchymal Stromal Cells (PLX-PAD) Following Intramuscular Delivery *Toxicologic Pathology* 37(5):606-16.

(336) Feo FD, Jacobson S, **Nyska A**, Pagani P, Traverso CE (2009). Histopathological biocompatibility of a stainless steel miniature glaucoma drainage device in humans. *Toxicologic Pathology* 37(4):512-6.

(337) Zhang Y, El-Sikhry H, Haudhary K, Batchu SN, Shayeganpour A, TO J., Bradbury A, Graves JP, DeGraff LM, Myers P, Douse D, Foley J, **Nyska A**, ZeldinDC, Seubertl J (2009). Overexpression of CYP2J2 Provides Protection against Doxorubicin Induced Cardiotoxicity. *American Journal of Pathology* 297(1):H37-46.

(338) Golomb E, **Nyska A.**, Swalb H, (2009). Occult Cardiotoxicity – Toxic effects on cardiac ischemic tolerance. *Toxicologic Pathology* 37(5):572-93.

(339) Ramot Y., Manno R., Yoshizawa O, Krakovsky M, Lamensdorf I., Meiron M, Toren A., **Nyska A.** (2009). Spontaneous Aortitis in the Balb/c Mouse and the Importance of Multiple-Section Sampling. *Toxicologic Pathology* 37(5):667-71.

(340) Yoshizawa K, Jelezcova E, Brown AR, Foley JF, **Nyska A**, Cui X, Hofseth LJ, Maronpot RR, Wilson AH, Sepulveda AT, Sobol RW (2009). Gastrointestinal Hyperplasia with Altered Expression of DNA Polymerase β . *PLoS ONE* 4(8):e6493

(341) **Nyska A.**, Cunningham M, Snell M, Malarkey D, Sutton S, Dunick J (2009). The pivotal role of electron microscopic evaluation in investigation of the cardiotoxicity of bis(2-chloroethoxy)methane in rats and mice. *Toxicologic Pathology* 37(7):873-7

(342) Ramot Y, **Nyska A.** Lieuallen W, Maly A, Flake F, Kissling GE, Brix A, Malarkey DE, Hooth ML (2009). Inflammatory and chloracne-like skin lesions in B6C3F1 mice exposed to 3,3',4,4'-tetrachloroazobenzene for 2 years . *Toxicology* 265(1-2):1-9

(343) Yoshizawa K, Brix AE, Sells DM, Jokinen MP, Orzech DP, Kissling G, Walker NJ, **Nyska A** (2009). Reproductive Lesions in Female Harlan Sprague-Dawley Rats Following Two-Year Oral Treatment with Dioxin and Dioxin-like Compounds. *Toxicologic Pathology* 37:921-37

(344) Ramot Y., Steiner M, Morad V, Amouyal N, Cesta M, **Nyska A** (2010). Pulmonary thrombosis in the mouse following intravenous administration of quantum dot-labelled mesenchymal cells. *Nanotoxicology* ;4(1):98-105

(345) Carll AP, Haykal-Coates,N, Winsett DW, Rowan WH, Hazari MS, Ledbetter AD, **Nyska A**, Cascio WE, Watkinson WP, Costa DL, Farraj AK (2010). Particulate Matter Inhalation Exacerbates Cardiopulmonary Injury in a Rat Model of Isoproterenol-induced Cardiomyopathy. *Inhalation Toxicology* 22:355-68.

(346) Amir G, Goldfarb AW, Nyska M, Redlich M, **Nyska A**, Nitzan DW. (2011). The 2-butoxyethanol female rat model of hemolysis and disseminated thrombosis: a proposed model for studying the vascular mechanism of osteoarthritis *British Journal of Oral & Maxillofacial Surgery* 49; 21 – 25.

(347) Singh BP, **Nyska A**, Kissling GE, Lieuallen W, Johansson SL, Malarkey DE, Hooth MJ (2010). Urethral carcinoma and hyperplasia in male and female B6C3F1 mice treated with 3,3',4,4'-Tetrachloroazobenzene (TCAB). *Toxicologic Pathology* 38(3): 372–381.

(348) Pewzner-Jung <http://www.jbc.org/content/early/2010/01/28/jbc.M109.077610.abstract> - [aff-1](#) Y, Brenner O, Baum S, Laviad EL, Ben-Dor S, Feldmesser E, Horn – Saa S, Amann-Zalcenstein D, Raanan C, Berkutski T, Erez-Roman R, Ben David O, Levy M, Holzman D, Park H, **Nyska A**, Merrill Jr, AH, Futerman AH (2010). A critical role for ceramide synthase 2 in liver homeostasis: A

critical role for ceramide synthase 2 in liver homeostasis: II. insights into molecular changes leading to hepatopathy. *Journal of Biological Chemistry* 285(14):10911-23

(349) Shuvy M, **Nyska A**, Beeri R, Abedat S, Gal-Moscovici A; M. Rajamannan N Lotan C (2010) Histopathology and Apoptosis in an Animal Model of Reversible Renal Injury. *Exp Tox Pathol* (In Press)

(350) Cohen SM, Gordon EB, Singh P, Arce GT, **Nyska A** (2010). Carcinogenic Mode of Action of Folpet in Mice and Evaluation of Its Relevance to Humans. *Critical Review in Toxicology* 40(6):531-4 .

(351) Auerbach SS, Thomas R, Shah R, Xu H, Vallant MK, **Nyska A**, Dunnick JK (2010). Comparative phenotypic assessment of cardiac pathology, physiology and gene expression in C3H/HeJ, C57BL/6J, and B6C3F1/J mice. *Toxicologic Pathology* 2010;38(6):923-42

(352) Chan PC, Ramot Y, Malarkey DE, Blackshear P, Kissling GE, Travlos G, **Nyska A** (2010) 14-Week Toxicity Study of Green Tea extract in Rats and Mice. *Toxicologic Pathology* 38:1070-84

(353) Maronpot RR, Yoshizawa K, **Nyska A**, Harada T, Flake G, Mueller G, Singh B, Ward JM (2010). Hepatic Enzyme Induction: Histopathology. *Toxicologic Pathology* 38(5):776-958

(354) Yoshizawa K, Walker NJ, **Nyska A**, Kissling G, Jokinen MP, Brix AE, Sells DM, Wyde ME (2010). Thyroid Follicular Lesions Induced by Oral Treatment for Two Years with 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin and Dioxin-like Compounds in Female Harlan Sprague-Dawley Rats. *Toxicologic Pathology* 38:1037-50

(355) Adams ET, Auerbach S, Blackshear P, Bradley A, GruebbelMM, Little PB, Malarkey D, Maronpot R, McKay J, Miller RA, Moore RR, Morrison JP, **Nyska A**, Ramot Y, Rao D, Suttie A, Wells MY, Willson GA, Elmore SA (2010). Proceedings of the 2010 National Toxicology Program Satellite Symposium. *Toxicologic Pathology* 39: 240-66

(356) Dunnick JK, Singh B, **Nyska A**, Peckham J, Kissling GE, Sanders JM (2010). Investigating the potential for toxicity from long-term use of the herbal products, Goldenseal and Milk thistle. *Toxicologic Pathology* 39:398-409

(357) Thoolen B, Maronpot RR, Harada T, **Nyska A**, Rousseaux C, Nolte T, Malarkey D, Kaufmann W, Küttler K, Deschl U, Nakae D, Gregson R, Vinlove M, Brix A, Singh B, Belpoggi F, JWard JM (2010). IN HAND - Proliferative and Nonproliferative Lesions of the Rat and Mouse Hepatobiliary System. *Toxicologic Pathology* 38: 5S-81S.

(358) Kodavanti UP, Thomas R, Ledbetter AD, Schladweiler MC, Shannahan JH, Wallenborn JC, Lund AK, Campen MJ, Butler EO, Gottipolu RR, **Nyska A**, Richards JE, Andrews D, Jaskot RH, McKee J, Kotha SR, Patel RB, Parianandi NL (2011). Vascular and Cardiac Impairments in Rats Inhaling Ozone and Diesel Exhaust Particles. *Environ Health Perspect.* 119:312-8

(359) Ramot Y, Eliahu SB, Kagan L, Ezov N and **Nyska A** (2009) Subcutaneous and Intraperitoneal Lipogranulomas Following Subcutaneous Injection of Olive Oil in Sprague-Dawley Rats. *Tox Pathol* 37:882-886.

(360) Shannahan JH, Schladweiler MCJ, Padilla-Carlin DJ, **Nyska A** , Richards JH, Ghio AJ, Gavett SH, and Kodavanti UP (2011). Acute Pulmonary Inflammation and Injury in Rat Models of Cardiovascular Disease after Exposure to Libby Amphibole. *Inhalation Toxicology* 23:129-41.

(361) Gordon CJ, Gottipolu RR, Kenyon EM, Thomas R, Schladweiler MC, Mack CM, Shannahan JH, Wallenborn JG, **Nyska A**, MacPhail RC, Richards JE, Devito M, Kodavanti UP. (2010). Aging and susceptibility to toluene in rats: a pharmacokinetic, biomarker, and physiological approach. *J Toxicol Environ Health A* 73:301-318.

(362) Padilla-Carlin DJ, Mette Schladweiler CJ, Shannahan JH, Kodavanti UP, **Nyska A**,

Burgoon LD, Gavett SH (2011). Pulmonary inflammatory and fibrotic responses in Fischer 344 rats after intratracheal instillation exposure to Libby amphibole. *J Toxicol Environ Health A* 74(17):1111-32.

(363) Vezzali E, Manno RA, Salerno D, Oberto G., **Nyska A.**, Ramot Y (2011) Spontaneous Glomerulonephritis in Göttingen Minipigs. *Toxicologic Pathology* 39(4):700-5

(364) Jokinen MP, Boyle M, Lieuallen WG, Johnson CL, Malarkey DE, **Nyska A** (2011) Morphologic Aspects of Rodent Cardiotoxicity in a Retrospective Evaluation of National Toxicology Program Studies. *Toxicologic Pathology* 39(5):850-60.

(365) Zheng C, Voutetakis A, Goldstein B, Afione S, Rivera VM, Clackson T, Wenk ML, Boyle M, **Nyska A**, Chiorini JA, Vallant M, Irwin R, Baum BJ (2011). Assessment of the safety and biodistribution of a regulated AAV2 gene transfer vector after delivery to murine submandibular glands. *Toxicological Sciences*. 123(1):247-55.

(366) Morgan D, **Nyska A.**, Cesta M, Kissling G (2011). Site Carcinogenicity and Respiratory Toxicity of Inhaled 1-Bromopropane in Rats and Mice. *Toxicologic Pathology* 39(6):938-48.

(367) Kadiiska MB, Hatch G, **Nyska A**, Jones D, Hensley K, Stocker R, George M, ; Van Thiel D, Stadler K; Barrett JC, Mason RP. (2011). Biomarkers of Oxidative Stress Study IV: Ozone Exposure of Rats and its Effect on Antioxidants in Plasma and Bronchoalveolar Lavage. *Free Radical Biology & Medicine*. 51(9):1636-42.

(368) Shannahan JH, **Nyska A**, Cesta M, Schladweiler MCJ, Vallant BD, Ward WO, Ghio AJ, Gavett SH, Kodavanti UP (2011). Atypical pulmonary hyperplastic lesions developing in subchronic pulmonary pathology, iron-overload and transcriptional activity after Libby Amphibole exposure in rat models of cardiovascular disease. *Environmental Health Perspectives* 120(1):85-91

(369) Behl M, **Nyska A**, Chhabra RS, Travlos GS, ; Fomby LM, Sparrow BR, Hejtmancik MR; Chan PC (2011). Liver Toxicity and Carcinogenicity in F344/N Rats and B6C3F1 Mice Exposed to Kava Kava Food and Chemical Toxicology. *Food and Chemical Toxicology* 49(11):2820-9.

(370) Boorman G, Crabbs TA, Kolenda-Roberts H, Latimer K, Miller AD., Muravnick KB, **Nyska A**, Ochoa R, Pardo ID, Ramot Y, Rao DB, Schuh J, Suttie A, Travlos GS, Ward JM, Wolf JC, and Elmore SA (2011). Proceedings of the 2011 National Toxicology Program Satellite Symposium. *Toxicologic Pathology* 40(2):321-344.

(371) Ramot Y, Rosenstock M, Klinger E, Bursztyn D, **Nyska A**, Shinar DM (2012). Comparative long-term preclinical safety evaluation of two glatiramoid compounds (glatiramer acetate, Copaxone®, and TV-5010, protiramer) in rats and monkeys. *Toxicologic Pathology* 40(1):40-54.

(372) Carll AP, Haykal-Coates N, Winsett DW, Hazari MS, **Nyska A**, Richards JH, Willis MS, Costa DL, Farraj AK (2011). Salt exacerbates isoproterenol-induced cardiomyopathy in rats. *Toxicologic Pathology* 39(6):925-37

(373) Ramot Y, Vered M, Malarkey DE, Hooth MJ, Painter JT, Dayan D, Clayton N, Masinde T, **Nyska A** (2012). Immunohistochemical Features of 3,3',4,4 Tetrachloroazobenzene-Induced Rat Gingival Lesions. *Toxicologic Pathology*;40:577-592.

(374) Boyle MC, Crabbs TA, Wyde ME, Painter JT, Hill GD, Malarkey DE, Lieuallen WG, **Nyska A** (2012). Intestinal Lymphangiectasis and Lipidosis in Rats Following Subchronic Exposure to Indole-3-carbinol via Oral Gavage. *Toxicologic Pathology* 40(4):561-76.

(375) Golomb E, Matza D, Cummings C, Schwalb H, Kodavanti UP, Schneider A, Houminer E, Korach A, **Nyska A**, Shapira OM (2012). Myocardial Mitochondrial Injury Induced by Pulmonary Exposure to Particulate Matter in Rats. *Toxicologic Pathology* 40(5):779-88

(376) Cyphert JM, Padilla-Carlin DJ, Schladweiler MC, Shannahan JH, **Nyska A**, Kodavanti UP, Gavett SH (2012). Long Term Response of Rats to Single Intratracheal Exposure of Libby Amphibole or Amosite. *J Toxicol Environ Health A* 75(3):183-200.

(377) Hooth MJ, **Nyska A**, Fomby LM, Vasconcelos DY, Vallant M, DeVito MJ, Walker NJ (2012). Repeated dose toxicity and relative potency of 1,2,3,4,6,7-hexachloronaphthalene (PCN 66) 1,2,3,5,6,7-hexachloronaphthalene (PCN 67) compared to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) for induction of CYP1A1, CYP1A2 and thymic atrophy in female Harlan Sprague-Dawley rats. *Toxicology* 301(1-3):85-93

(378) Cyphert JM, **Nyska A**, Mahoney R, Schladweiler MC, Kodavanti UP, Gavett SH (2012). Sumas Mountain chrysotile induces greater lung fibrosis in Fischer 344 rats than Libby amphibole, El Dorado tremolite, and Ontario ferroactinolite. *Toxicol Sci* 130(2):405-15

(379) Dunnick JD, **Nyska A** (2013). The Toxicity and Pathology of Selected Dietary Herbal Medicines *Toxicologic Pathology* 41(2):374-86

(380) Madi L, Korenstein R, Haggen B, **Nyska A** (2012). Enhancing pigmentation via activation of A3 adenosine receptors in B16- melanoma cells and in human skin explants. *Experimental Dermatology* 22(1):74-7

(381) Elkis Y, Bel S, Lerer-Goldstein T, **Nyska A**, Creasy DM, Shpungin S, Nir U. (2012). Testosterone Deficiency Accompanied by Testicular and Epididymal Abnormalities in TMF(-/-) Mice. *Molecular and Cellular Endocrinology* 365(1):52-63

(382) Ramot Y, **Nyska A**, Specter G (2013). Drug-induced thrombosis - an update. *Drug Safety* 36(8):585-603

(383) Hoenerhoff MJ, Pandiri AR, Snyder SA, Hong HH, Ton TV, Peddada S, Shocklet K, Witt K, Chan P, Rider C, Kooistra L, **Nyska A**, Sills RX (2013). Hepatocellular Carcinomas in B6C3F1 Mice Treated with *Ginkgo biloba* Extract for Two Years Differ from Spontaneous Liver Tumors in Cancer Gene Mutations and Genomic Pathways. *Toxicologic Pathology* 41(6):826-41

(384) Khan W, Farah S, **Nyska A**, Domb AJ (2013). Carrier free rapamycin loaded drug eluting stent: In vitro and in vivo evaluation. *J Con Release* 168(1):70-6.

(385) Gordon CJ, Jarema KA, Lehmann JR, Ledbetter AD, Schladweiler MC, Schmid JE, Ward WO, Kodavanti UP, **Nyska A**, Macphail RC (2013). Susceptibility of adult and senescent Brown Norway rats to repeated ozone exposure: an assessment of behavior, serum biochemistry and cardiopulmonary function. *Inhalation Toxicology* 25:141-59.

(386) Kodavanti UP, Thomas RF, Lebetter AD, Schlaweiler MC, Bass V, Krantz QT, King C, **Nyska A**, Richards JE, Andrews D, Gilmour MI (2013). Diesel exhaust induced pulmonary and cardiovascular impairment: The role of hypertension intervention. *Toxicology and Applied Pharmacology* 268(2):232-40

(387) Sosna J, Havivi E, Khan W, Appelbaum L, **Nyska A**, Domb AJ (2014). Computed tomography of Lipiodol-loaded biodegradable pasty polymer for implant visualization. *Contrast Media Mol Imaging*. 9:246-51.

(388) Rider CV, **Nyska A**, Cora MC, Kissling GE, Smith C, Travlos GS, Hejtmancik MR, Fomby LM, Colleton CA, Ryan MJ, Kooistra L, Morrison JP, Chan PC. (2014). Toxicity and Carcinogenicity Studies of Ginkgo biloba Extract in Rat and Mouse: Liver, Thyroid, and Nose Are Targets. *Toxicol Pathol*. 42(5):830-843

(389) **Nyska A**, Schiffenbauer YS, Brami CT, Maronpot RR, Ramot Y (2014). Histopathology of biodegradable polymers: Challenges in interpretation and the use of Novel Compact MRI for biocompatibility evaluation. *Polymers for Advanced Technologies*.25; 461–467

(390) Ickowicz DE, Haim-Zada M, Abbas R, Touitou D, **Nyska A**, Domb AJ (2014). Castor oil- citric acid copolyester for tissue augmentation . *Polymers for Advanced Technologies*. Volume 25, Issue11 Special Issue: From macromolecules to materials to systems, November 2014, Pages 1323-1328

(391) Ramot Y, Brauner R, Kang K, Heymach JV, Furtado S, **Nyska A** (2014) Quantitative evaluation of drug-induced microvascular constriction in mice kidney using a novel tool for 3D geometrical analysis of ex-vivo organ vasculature. *Toxicologic Pathology* 42: 774-783.

(392) Bel S, Elkis Y, Elifantz H, Koren O, Ben-Hamo R, Lerer-Goldshtein T, Ben Horin S, **Nyska A**, Shpungin S, Nir U (2014). Reprogrammed and Transmissible Intestinal Microbiota Confer Diminished Susceptibility to Induced Colitis in TMF-/- Mic. *PNAS* 111(13):4964-9

(393) Thakur SA, **Nyska A**, White KL Jr, Smith MJ, Auttachoat W, Germolec DR.(2014). Immunomodulatory activity of orphan drug Elmiron® in female B6C3F1/N mice. *Food Chem Toxicol*. 68:196-203.

(394) Ramot Y, Touitou D, Levin G, Ickowicz DE, Zada MH, Abbas R, Yankelson L, Domb AJ, **Nyska A** (2014) Interspecies differences in reaction to a biodegradable subcutaneous tissue filler: severe inflammatory granulomatous reaction in the Sinclair minipig. *Toxicologic Pathology* 43(2):267-71

(395) Cyphert JM, Padilla-Carlin DJ, Schladweiler MC, Shannahan JH, **Nyska A**, Kodavanti UP, and Gavett SH (2015). Comparative long-term toxicity of Libby amphibole and amosite asbestos after single or multiple intratracheal exposures. *Journal of Toxicology and Environmental Health, Part A*. 78(3):151-65.

(396) Ramot Y, Kodavanti UP, Kissling GE, Ledbetter AD, **Nyska A** (2015) Clinical and pathological manifestation of cardiovascular disease in rat models: the influence of acute ozone exposure. *Inhalation Toxicology* 2015;27 Suppl 1:26-38.

(397) Bloch M, Jablonowski L, Wheatley M, Yavin E, Nyska A, Rubinstein A (2015). Multi-modal detection of colon malignancy by NIR-tagged recognition polymers and ultrasound contrast agents" *International Journal of Pharmaceutics*. 30;478(2):504-16 .

(398) Berridge BB, Mowat V, Nagai H, **Nyska A**, Okazaki Y, Clements PJ, Rinke . Snyder P, Boyle MC, Wells MW (2015). International Harmonization of Nomenclature and Diagnostic Criteria (INHAND): Non-proliferative and Proliferative Lesions of the Cardiovascular System of the Rat and Mouse A joint publication of the American, British, European, and Japanese Societies of Toxicologic Pathology. *J Toxicol Pathol*. 2016;29(3 Suppl):1S-47S

(399) Harvey JB, Hong HHL, Bhusari S, Ton TV, Wang Y, Foley JF, Peddada SD, Hooth M, DeVito M, **Nyska A**, Pandiri AR, Hoenerhoff MJ, (2016). F344/NTac Rats Chronically Exposed to Bromodichloroacetic Acid Develop Mammary Adenocarcinomas With Mixed Luminal/Basal Phenotype and Tgfb Dysregulation. *Veterinary Pathology* 53(1):170-81

(400) Tempel Bami C, Schiffenbauer Y, **Nyska A**, Abramovitch R, Ezov N, Spector I, Maronpot RR (2015) Practical Applications of in vivo and ex vivo MRI in toxicologic pathology using a novel high-performance compact MRI system. *Toxicologic Pathology* 43(5):633-50.

(401) Ramot Y, **Nyska A**, Markovitz E, Dekel A, Klaiman G, Haim Zada M, Domb AJ, Maronpot RR (2015). Long-term local and systemic safety of poly(l-lactide-co-epsilon-caprolactone) after subcutaneous and intra-articular implantation in rats. *Toxicologic Pathology* 43: 1127-1140.

(402) Bass VL, Schladweiler MC, **Nyska A**, Thomas RF, Miller DB, Krantz T, King C, Gilmour MI, Ledbetter AD, Richards JE and Kodavanti UP (2015). Comparative Cardiopulmonary Toxicity of Exhausts from Soy-Based Biofuels and Diesel in Healthy and Hypertensive Rats. *Inhalation Toxicology* 27:545-56

(403) Harrill J, Lasko D, **Nyska A.**, Hukkanen R, Manno R Grassetti A, Lawson M, Martin G, Budinsky R, Rowlands, JC, Thomas R (2016). Aryl hydrocarbon receptor knockout rats are insensitive to pathological effects of repeated oral exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *International J Toxicology* 36(6):802-14

(404) Reifen R, Karlinsky A, Stark A, Berkovich Z, **Nyska A** (2015). Alpha-Linolenic Acid (ALA) is an Anti-Inflammatory Agent in Inflammatory Bowel Disease. *Journal of Nutrition Biochemistry Review* 26(12):1632-40

(405) Cyphert JM, McGee MA, , **Nyska A**, Schladweiler MC, Kodavanti UP, Gavett SH (2016). Long term toxicity of naturally occurring asbestos in male Fischer 344 rats. *Journal of Toxicology and Environmental Health, Part A*. 79(2):49-60

(406) Manno RA, Grasseti A, Oberto G, **Nyska A** (2016). The minipig: An alternative animal model for the evaluation of antineoplastic drugs. *Int. J. Toxicol.* 36:1060-72.

(407) Ramot Y, Yellin N, Rousselle S, Willenz u, Sabag I, **Nyska A** (2016). Biocompatibility and systemic safety of a novel implantable annuloplasty ring for the treatment of mitral regurgitation in a minipig model. *Toxicologic Pathology* 44:655-62

(408) Maronpot RR, **Nyska A**, Foreman JE, Ramot Y (2016). The Legacy of the F344 as a Cancer Bioassay Model (A Retrospective Summary of Three Common F344 Neoplasms). *Critical Reviews in Toxicology*. (In Press)

(409) Ramot Y, Zada MH, Domb AJ , **Nyska A** (2016). Biocompatibility and safety of PLA and its copolymers. *Advanced Drug Delivery Reviews*. Volume 107, 153-162

(410) Ramot R, Rotkopf S, Gabai RM, Khvalevsky EZ, Muravnik S, Marzoli JA, Domb AJ, Shemi A, **Nyska A** (2016). Preclinical safety evaluation in rats of a polymeric matrix containing a siRNA drug used as a local and prolonged delivery system for pancreatic cancer therapy. *Toxicologic Pathology* 44:856-65.

(411) Goldsmith M, Ashani Y, Margalit R, **Nyska A**, Mirelman D, Tawfik DS (2016). A New Post-Intoxication Treatment of Paraoxon and Parathion Poisonings Using an Evolved PON1 Variant and recombinant GOT1. *Chemico-Biological Interactions* (In Press)

(412) Ramot Y, Weber K, Moreno Lobato B, Miguel Sánchez Margallo F, Francisco Guillén Caro J, Dávila Gómez L, Shabat R, **Nyska A** (2016) Trauma as a cause for hepatopathy in Newborn Göttingen minipigs: a procedure-related finding complicating interpretation of toxicity studies. *Toxicologic Pathology* 44(8):1123-1127.

(413) **Nyska A**, Hayashi SM, Koyanagi M, Davis JP, Jokinen MP, Ramot Y, Maronpot RR (2016). Ninety-day and single-dose toxicity study of alpha-glycosyl isoquercitrin in Sprague-Dawley rats. *Food and Chemical Toxicology* 97 (2016) 354-366.

(414) Blum S., Shapir N., Neil A., Miari R., Lerner B., Koren B., Doenyas-Barak K., Efrati S., Pergola E. P., Schwartz D., Chernin G., 4 Yagil Y., Guzy S., **Nyska A** (2016). TARGT gene therapy platform for correction of anemia in ESRD patients. *New England Journal of Medicine* 12;376(2):189-191

(415) Ramot Y, Schiffenbauer Y, Amouyal N, Ezov N, Steiner M, Izrael M, Lavon N, Hasson A, Revel M, **Nyska A** (2017) Compact magnetic resonance imaging for the detection of teratoma development following intrathecal human embryonic stem cells injection in NOD-SCID mice. *Neurotoxicology* 6;59:27-32.

(416) Ramot Y, Schiffenbauer Y, Maronpot RR, **Nyska A** (2017). Emerging Techniques and Approaches - Compact magnetic resonance imaging systems – novel cost-effective tools for preclinical drug safety and efficacy evaluation. *Toxicological Sciences* 157(1), 2017, 3–7

(417) Mizrahi B, Kelmansky R, McAlvin B, **Nyska A**, Dohlman J Chiang H, Hashimoto M, Kohane DS (2017). Strong Tissue Glue with Tunable Elasticity. *Acta Biomaterialia* S1742-7061(17)30114-9.

(418) Maronpotl **RR**, **Nyska, A**, Troth SP, Gabrielson⁴ K Sysa-Shah P, Kalchenko V, Kuznetsov Y, Harmelin A, Schiffenbauer Y, Bonnel D, Stauber J, Ramot Y (2017). Regulatory Forum, Opinion Piece: Imaging Applications in Toxicologic Pathology – Recommendations for Use in Regulated Non-Clinical Toxicity Studies. *Toxicologic Pathology* 45(4):444-471.

(419) Shaltiel-Karyo R, Tsarfati R, Rubinski A, Zawoznik E, Weinstock I, Nemas M, Schiffenbauer YS, Ramot Y, **Nyska A**, Yacoby-Zeev O (2017). Magnetic resonance imaging as a non-invasive method for longitudinal monitoring of infusion site reactions following administration of a novel apomorphine formulation. *Toxicologic Pathology* 45(4):472-480.

(420) Elkis Y, Cohen M, Yaffe E, Satmary-Tusk S, Feldman T, Hikri E, **Nyska A**, Feiglin A, Ofran Y, Shpungin S, Nir U (2017) A novel Fer/FerT targeting compound selectively evokes metabolic stress and necrotic death in malignant cells. *Nature Communications* 8(1):940.

(421) Shtriker MG, Hahna M, Taieba E, **Nyska A**, Moallemc U, Tirosh O, Madar Z(2018). Fenugreek galactomannan and citrus pectin improved several parameters associated with glucose metabolism and modulate gut microbiota in mice. *Nutrition* 46:134-142.

(422) Ramot Y, **Nyska A**, Maronpot RR, Shaltiel-Karyo R, Tsarfati Y, Manno RA, Sacco G, Yacoby-Zeevi O (2017). Ninety-day local tolerability and toxicity study of ND0612, a novel formulation of levodopa/carbidopa, administered by subcutaneous continuous infusion in minipigs. *Toxicologic Pathology* 45(6):764-773.

(423) Ramot Y, Obaya A, McNamara A, **Nyska A** (2017). Cutaneous candidiasis in a Gottingen minipig: a potential pitfall in preclinical studies. *Toxicologic Pathology* 45(8):1032-1034

(424) Siegel S, Regelman R, Maronpot RR, Rosenstock M, **Nyska A** (2017). NEW TECHNOLOGIES: Real Time Telepathology Systems—Novel Cost-Effective Tools for Real-Time Consultation and Data Sharing. *Toxicologic Pathology* 45(8):1039-1042.

(425) Hailey JR, Angela R. Hughes-Earle, Beverly E. Maleeff, Heath C. Thomas, Gail Pearse, Jan C. Klapwijk, Patrizia G. Cristofori, Brian Berridge, Carie L. Kimbrough, George A. Parker, Daniel Morton, Susan Elmore, Jerry F. Hardisty, Rodney A Miller, Noel O. Dybdal , David Rehagen, James D. Fikes, Martin Lamb, Kathleen Biddle, Bernard S Buetow, Vinicius Carreira, **Abraham Nyska**, Niraj K. Tripathi, Heather C. Workman, Jean-Guy Bienvenu, Ingrid Brees, James R Turk, and Rick R. Adler. (2017) A Diagnostic approach for Murine Progressive Cardiomyopathy and Like Lesions in Toxicology Studies up to 28-days in the Sprague Dawley Rat (**Part 1 of 2**). *Toxicologic Pathology* 45(8):1043-1054. (selected as the “2018 Best Paper Award” by the Society of Toxicologic Pathology”).

(426) Hailey JR, Angela R. Hughes-Earle, Beverly E. Maleeff, Heath C. Thomas, Gail Pearse, Jan C. Klapwijk, Patrizia G. Cristofori, Brian Berridge, Carie L. Kimbrough, George A. Parker, Daniel Morton, Susan Elmore, Jerry F. Hardisty, Rodney A Miller, Noel O. Dybdal , David Rehagen, James D. Fikes, Martin Lamb, Kathleen Biddle, Bernard S Buetow, Vinicius Carreira, **Abraham Nyska**, Niraj K. Tripathi, Heather C. Workman, Jean-Guy Bienvenu, Ingrid Brees, James R Turk, and Rick R. Adler. (2017). A Diagnostic approach for Murine Progressive Cardiomyopathy and Like Lesions in Toxicology Studies up to 28-days in the Sprague Dawley Rat (**Part 2 of 2**). *Toxicologic Pathology* 45(8):1055-1066. (selected as the “2018 Best Paper Award” by the Society of Toxicologic Pathology”).

- (427) Ramot Y, Hazan Z, Lucassen A, Adamsky K, Santhosh K, Vijayasarathi SK, Krishnappa H, Singh M, **Nyska A** (2018). Toxicity and toxicokinetic study of RPh201 in Sprague-Dawley rats. *Food and Chemical Toxicology* 112:168-177.
- (428) Gabrielson K, Maronpot R, Monette S, Mlynarczyk C, Ramot Y, **Nyska A**, Sysa-Shah P (2018). In vivo imaging in translational research with validation to pathology for increased rigor and reproducibility - a review of examples, options and resources to improve research outcomes. *The ILAR Journal* 59(1):80-98.
- (429) Ramot Y, **Nyska A**, Adar L, Durlach C, Fishelovitch D, Sacco G, Manno R, Oren S, Perlstein I, Zeevi O (2018). ND0701- a novel formulation of Apomorphine for subcutaneous infusion in comparison to a commercial apomorphine formulation: Twenty-eight day pharmacokinetic study in minipigs and a phase 1 study in healthy volunteers to assess the safety, tolerability, pharmacokinetics and relative bioavailability. *CNS DRUGS* 32(5):443-454.
- (430) Ramot Y, Hazan Z, Lucassen Z, Adamsky K, Ross V, Young N, SaundersM, Ehall M, **Nyska A** (2018). Toxicity and toxicokinetic study of subcutaneously-administered RPh201 in minipigs. *Toxicologic Pathology* 46(6):693-705.
- (431) Siegel G, Regelman D, Maronpot RR, Rosenstock R, Hayashi S, 4, **Nyska A** (2018). Utilizing novel telepathology system in preclinical studies and peer review. *Japanese Journal of Toxicologic Pathology* 31(4):315-319.
- (432) Lufton M, Bustan O, Berman J, Shtifman Segal E, Croitoru-Sadger T, Shagan A, Orbach A, Corem-Salkmon E, **Nyska A** and Mizrahi B (2018). Living Bacteria in Thermo-Responsive Gel for Treating Fungal Infections. *Advanced Functional Materials*. Vol. 28 • No. 40 • October 4.
<https://onlinelibrary.wiley.com/doi/abs/10.1002/adfm.201801581>
- (433) Yogev S, Orbach A, **Nyska A**, Mizrahi B (2019) Local toxicity of thermo-responsive systems: in vitro studies with in vivo correlation. *Toxicologic Pathology* 47(3):426-432
- (434) Shtriker MG, Peri I, Taieb E, **Nyska A**, Tirosch O, Madar Z (2018). Galactomannan More Than Pectin Exacerbates Liver Injury In Mice Fed High-Fat, High-Cholesterol Diet. *Mol Nutr Food Res* 62(20):e1800331. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/mnfr.201800331>
- (435) Ramot Y, Kannan K, Reddy S, Krishnappa H, Dillberger JE, **Nyska A** (2019). Acute histopathologic findings related to needle puncture-trauma during subcutaneous injection in the Sprague-Dawley rat model. *Toxicologic Pathology* 47(1):93-96.
- (436) Weiss A, Spektor L, Lifshitz L, Magid Gold I, Zhang DL, Truman-Rosentsvit M, Leichtmann-Bardoogo Y, **Nyska A**, Addadi S, Rouault TA, Meyron-Holtz EG, Cohen LA (2018). Orchestrated regulation of iron trafficking proteins in the kidney during iron overload facilitates systemic iron retention. *PLOS ONE* 15;13(10):e0204471
- (437) Rousselle S, Ramot Y, **Nyska A**, Jackson N (2019). Pathology of bioabsorbable implants in preclinical studies. *Toxicologic Pathology* 47(3):358-378
- (438) Weiss D, Yaakovovitch H, Tal S, **Nyska A**, Rotman OM (2019). Novel Short Peripheral Catheter Design for Prevention of Thrombophlebitis. *Journal of Thrombosis and Haemostasis*. 17(1):39-51
- (439) Ben Yehuda A, **Nyska A**, Szold A (2019). Mesh Fixation using Novel Bio-adhesive Coating Compared to Tack Fixation for IPOM Hernia Repair: In-vivo Evaluation in a Porcine Model. *Surgical Endoscopy* 33(7):2364-2375.

- (440) Ramot R, Kronfeld N, Steiner M, Hadid A, Sudak M, **Nyska A** (2019) Biodegradability and safety study of LifeMesh™, a novel self-adhesive mesh, in Sprague-Dawley rats. *Toxicologic Pathology* 47(4):483-493
- (441) Ramot Y, Nedvetzki S, Rosenfeld S, Emanuel N, **Nyska A** (2019) Toxicity and safety study of D-PLEX100 in a sternal wound model in New Zealand white rabbits. *Toxicologic Pathology* 47(4):504-514.
- (442) Maronpot RR, Ramot R, Koyanagi M, Dias N, Cameron D, Eniola S, **Nyska A**, Hayashi S (2019). 10-day and 4-week toxicity and toxicokinetics studies of alpha-glycosyl isoquercitrin in juvenile Göttingen minipigs. *Toxicology Research and Application* vol. 3, First Published June 12, 2019. Volume 3, January-December 2019. <https://journals.sagepub.com/doi/pdf/10.1177/2397847319855087>
- (443) Nudelman R, Fleicher S, Reshef L, **Nyska A**, Fine E, Gu-liakhmedov T, Voelcker NH, Gozin M, Richter S (2019). Jellyfish -based Smart Wound Dressings Devices Containing in-situ synthesized Antibacterial Nanoparticles. *Advanced Functional Materials*. Volume 29, Issue 38. <https://doi.org/10.1002/adfm.201902783>
- (444) **Nyska A**, Hayashi S, Maronpot RR, Ramot Y (2020) Review: The Pathology of Selected Dietary Herbal Medicines as observed in the National Toxicology Program Studies. *Foods & Food ingredients Journal of Japan*. FFI JOURNAL, Vol. 225, No.2. <https://focusontopath.com/articles/1-Dietary-Herbal-Abraham%20Nyska.pdf>
- (445) Assa Glazer T, Sela N, **Nyska A**, Madar Z (2019). Intestinal Content Transplantation Modulates Gut Microbiota and Leads to Lower Fasting Glucose in Mice Fed Trans-Fat Diet. *Forte Journal Of Nutrition And Food Science* <https://forteopen.com/nutrition-food-science/intestinal-content-transplantation-modulates-gut-microbiota-and-leads-to-lower-fasting-glucose-in-mice-fed-trans-fat-diet/>
- (446) Ramot Y, Klaiman K, Steiner S, Lavie Y, Belenky I, **Nyska A** (2020). Local tolerability and performance evaluation in domestic pigs of a fractional radiofrequency device for dermatologic treatment. *Toxicologic Pathology* 48(5):686-693.
- (447) Ramot Y, Nedvetzki S, Rosenfeld S, Rousselle SD, **Nyska A**, Emanuel N (2020). D-PLEX100 in an abdominal surgery incision model in miniature swine: Safety and efficacy study. *Toxicologic Pathology* 48(5):677-685.
- (448) Ramot Y, Zandani G, Madar Z, Seshmukh S, **Nyska A** (2020). Comparison of microscope-based semiquantitative assessment and artificial intelligence algorithm of fatty liver model in mice. *Toxicologic Pathology* 48(5):702-707.
- (449) Ramot Y, Steiner M, Klaiman G, Amouyal N, Lavie Y, Domb AJ, **Nyska A**, Hagigit T (2021). Treatment of contaminated radial fracture in Sprague-Dawley rats by application of a degradable polymer releasing gentamicin. *Journal of Toxicologic Pathology* 34(1):11-22
- (450) Ramot Y, Harnof S, Klein I, Amouyal N, Steiner M, Manassa NN, Bachar A, Rousselle S, **Nyska A** (2020) Local tolerance and biodegradability of a novel bioabsorbable artificial dura mater following implantation onto a dural defect in rabbits. *Toxicologic Pathology* 48(6):738-746.
- (451) Elise Taieb Bimro, Ran Hovav, Assa Glazer T, Sela N, **Nyska A**, Madar (2020). High Oleic Peanut Improve Parameter Led to Fatty Liver Development and Change the Microbiota in Mice Intestine. *Food & Nutrition Research* 2020; 64: 10.29219/fnr.v64.4278.

(452) Assa-Glazer T, Gorelick J, Sela N, **Nyska A**, Bernstein N, Madar Z (2020). Cannabis extracts affected metabolic syndrome parameters in mice fed high fat-cholesterol diet. *Cannabis and Cannabinoid Research* 5(3):202-214.

(453) Ramot Y, Shabashov D, Goldschmidt R, **Nyska A**. (2020). Nasal inflammation and ulceration secondary to repeated use of an intranasal delivery device in rabbits. *Toxicologic Pathology* 48(7) 909-912.

(454) Haim Zada M., Gallimidi Z., Schlesinger – Laufer M., **Nyska A.**, Domb, A. (2020). Biodegradable Breast Tissue Marker Clip. *ACS Appl. Bio Mater.* 2020, 3, 7439–7453.

(455) Ibrahim R, Brix A, Malarkey DE, **Nyska A**, Asif M, Ramot Y (2021). Chemical-Induced Oral Squamous Cell Cancer in Rodents: An Overview of NTP 2-year Cancer Studies. *Toxicologic Pathology* 49(5):1062-1076.

(456) Ramot Y, Deshpande A, Morello V, Michieli P, Shlomov T, **Nyska A** (2021). Microscope-based automated quantification of liver fibrosis in mice using a deep learning algorithm. *Toxicologic Pathology*. 49(5):1126-113.

(457) Mahapatra D, Donahue DA, **Nyska A**, Hayashi S , Koyanagi M, and Maronpot 1 RR (2021). alpha-Glycosyl Isoquercitrin (AGIQ) and its Lack of Carcinogenicity in rasH2 mice. *Food and Chemical Toxicology* (In Press May;151:112103 <https://www.sciencedirect.com/science/article/pii/S0278691521001368>).

(458) Ibrahim R, **Nyska A.**, Ramot Y, (2021). The toxicologic pathology aspects of selected natural herbal products and related compounds. *Journal of Toxicologic Pathology* 34: 181–211.

(459) Zandani G, Kaftori-Sandler N, Sela N, **Nyska A**, Madara Z (2021). Dietary broccoli improves markers associated with glucose and lipid metabolism through modulation of gut microbiota in mice. *Nutrition* (In Press 2021 Oct;90:111240. doi: 10.1016/j.nut.2021.111240. Epub 2021 Mar 24.PMID: 33931271

(460) Litvin G; Klein I; Litvin Y; Klaiman G, **Nyska A** (2021). CorNeat KPro 1 : Ocular Implantation Study in Rabbits. *Cornea* 40(9):1165-1174.

(461) Ben David N, Mafi M, **Nyska A**, Gross,A, Greiner A, Mizrahi B (2021). Bacillus Subtilis in PVA Microparticles for Treating Open Wounds. *ACS Omega* 20;6(21):13647-13653.

(462) Buaron N, Mangraviti A, Volpin F, Liu A, Pedone M, Sankey E, Aranovich D, Rodriguez F, **Nyska A**, Goldbart R, Traitel T, Brem H, Tyler B, and Kost J (2021). Pectic Galactan Polysaccharide based Gene Delivery System for Targeting Neuroinflammation. *Advanced Functional Materials* (In Press). First published: 10 June 2021

<https://doi.org/10.1002/adfm.202100643>

(463) Shimony N, Shagan A, Eylon BH, **Nyska A**, Gross A, Mizrahi B (2021). Liquid Co-Polymers as Biodegradable Surgical Sealant. *Advanced Healthcare Materials*. (In Press). doi: 10.1002/adhm.202100803. Online ahead of print.PMID: 34081412

(464) Ramot Y, Steiner M, Lavie Y, Ezov N, Laub O, Cohen E, Schwartz Y, **Nyska A** (2021). Safety and efficacy of sFilm-FS, a novel biodegradable fibrin sealant device, in Göttingen minipigs. *Journal of Toxicologic Pathology* 34(4):319-330

(465) Zandani, Anavi- Cohen S, Tsybina-Shimshilashvili N, Sela N, **Nyska A**, Madar Z (2021). Broccoli florets supplementation improves insulin sensitivity and alters gut microbiome population a steatosis mice model induced by high-fat diet. *Frontiers Nutrition*. (In Press).
2021 Jul 28;8:680241. doi: 10.3389/fnut.2021.680241. eCollection 2021.

(466) Ramot Y, Caselli G, Aurisicchio L, Andreini I, Marra E, Luberto L, Stoppoloni D, Pacello ML, Monetini L **Nyska A** (2021). Toxicity and local tolerance of COVID-eVax, a plasmid DNA vaccine for SARS CoV-2, delivered by electroporation. *Toxicologic Pathology* 49(7):1255-1268

(467) Madar-Balakirski N, Rosner A, Melamed S, Politi B, Steiner M, Tamir H, Yahalom-Ronen Y, Bar David E, Ben-Shmuel A, Sittner A, Glinert I, Weiss S, Bar-Haim E, Cohen H, Elia U, Achdout H, Erez N, Rotem S, Lazar S, **Nyska A**, Yitzhaki S, Beth-Din A, Levy H, Paran N, Israel T, Marcus H (2022). Nonclinical Safety and Immunogenicity of an rVSV-ΔG-SARS-CoV-2-S vaccine in mice, hamsters, rabbits and pigs. *Archives Toxicology*. 96(3):859-875

(468) Zandani G, Anavi-Cohen S, Sela N, **Nyska A**, Madar Z (2021). Broccoli consumption attenuates inflammation and modulates gut microbiome composition and gut integrity-related factors in mice fed with a high-fat high-cholesterol diet. *Food & Nutrition Research*. (In Press). Vol. 65.
DOI: <https://doi.org/10.29219/fnr.v65.7631>

(470) Matteo Iannacone; Antonella Conforti; Emanuela Marra; Fabio Palombo; Giuseppe Roscilli; Micol Rava; Valeria Fumagalli; Alessia Muzi; Mariano Maffei; Laura Luberto; Lucia Lione; Erika Salvatori; Mirco Compagnone; Eleonora Pinto; Emiliano Pavoni; Federica Bucci; Grazia Vitagliano; Daniela Stoppoloni; Maria Lucrezia Pacello; Manuela Cappelletti; Fabiana Fosca Ferrara; Emanuela D'Acunto; Valerio Chiarini; Roberto Arriga; **Abraham Nyska**; Pietro Di Lucia; Davide Marotta; Elisa Bono; Leonardo Giustini; Eleonora Sala; Chiara Perucchini; Jemma Paterson; Kathryn Ann Ryan; Amy-Rose Challis; Giulia Matusali; Francesca Colavita; Gianfranco Caselli; Elena Criscuolo; Nicola Clementi; Nicasio Mancini; Rüdiger Groß; Alina Seidel; Lukas Wettstein; Jan Münch; Lorena Donnici; Matteo Conti; Raffaele De Francesco; Mirela Kuka; Gennaro Ciliberto; Concetta Castilletti; Maria Rosaria Capobianchi; Giuseppe Ippolito; Luca Guidotti; Lucio Rovati; Luigi Aurisicchio COVID-eVax, an electroporated plasmid DNA vaccine candidate encoding the SARS-CoV-2 Receptor Binding Domain, elicits protective immune responses in animal models of COVID-19. *Molecular Therapy* 30(1):311-326

(471) Cohen-Erner, Moshe; Khandadash, Raz; Hof, Raphael ; Shalev, Ofer; Antebi, Adam; Cyjon, Arnoldo; Kanakov, Dian ; **Nyska, Abraham**; Goss, Glenwood; Hilton, John; Peer, Dan, (2021). Fe₃O₄ Nanoparticles and Paraffin Wax as Phase-Change Materials Embedded in Polymer Matrixes for Temperature-Controlled Magnetic Hyperthermia. *ACS Applied Nano Materials*. 4, 10, 11187–11198.

(472) Kraus S, Khandadash R, Hof R, **Nyska A**, Sigalov E, Eltanani M, Rukenstein P, Rabinovitz R, Kassem R, Antebi A, Shalev O, Cohen-Erner M, Goss G, Cyjon A (2021). Novel Nanoparticle-based Cancer Treatment, Effectively Inhibits Lung Metastases and Improves Survival in a Murine Breast Cancer Model. *Frontiers in Oncology*, section Breast Cancer Front Oncol Nov 5;11:761045. doi: 10.3389/fonc.2021.761045. eCollection 2021.

(473) Ramot Y, Rousselle S, Steiner M, Lavie Y, Ezov N, **Nyska A** (2022). Safety and performance evaluation of Su2ura® Approximation, a new suturing device, in pigs. *Toxicologic Pathology* 50(2) 211–217.

(473) Kraus S, Khandadash R, Hof R, **Nyska A**, Sigalov E, Eltanani M, Rukenstein P, Rabinovitz R, Kassem R, Antebi A, Shalev O, Cohen-Erner M, Goss G, Cyjon A (2022). Self-regulating novel iron oxide nanoparticle-based magnetic hyperthermia in swine: biocompatibility, biodistribution, and safety assessments. *Archives Toxicology*. 96(9):2447-2464

(474) Ramot R, Noam Kronfeld, Yakir Ophir, Nati Ezov, Sheli Friedman, Markku Saloheimo⁵, Marika Vitikainen, Hanna Ben-Artzi, Avi Avigdor, Ronen Tchelet, Noelia Valbuena Crespo, Mark Emalfarb, **Abraham Nyska** (2022). Toxicity and local tolerance of a novel spike protein RBD vaccine against SARS-CoV-2, produced using the C1 *Thermothelomyces heterothallica* protein expression platform. *Toxicologic Pathology* 50(3) 294– 307

(475) Amir Rosner, Michal Steiner, Sharon Melamed, Boaz Politi, Einat Vitner, Hadas Tamir, Hagit Achdout, Lilach Cherry, Roy Avraham, Yfat Yahalom Ronen, Haim Levy, Adi Beth-Din, Dana Stein, Adva Mechaly, Morly Fisher, Ella Fatelevich, Shay Weiss, Noam Kronfeld, **Abraham Nyska**, Shmuel Yitzhaki, Nir Paran, Tomer Israely, Hadar Marcus and Noa Madar-Balakirski (2022) rVSV-SARS-CoV-2-S Vaccine: Repeated Intramuscular (IM) Toxicity, Local Tolerance, Immunogenicity and Biodistribution Study in NZW Rabbits. *Archives Toxicology*. 96(8):2329-2339.

(476) Ramot Y, Delkarto O, Steiner M, Jahn S, Goldberg R, Cacical O, Lavie Y, Ezov N, Agar G, **Nyska A** (2022). Preclinical in-vivo safety of poly-phosphorylated superlubrication vectors for the treatment of osteoarthritis. *Toxicologic Pathology* 50(6) 787– 792

(477) O'Brien MT, Schuh JCL, Wancket LM, Cramer S, Funk KA , Jackson ND, Kannan K , Keane K, **Nyska A**, Rousselle SD, Schucker A , Thomas V, Tunev S (2022). Scientific and Regulatory Policy Committee Points to Consider for Medical Device Implant Site Evaluation in Nonclinical Studies. *Toxicologic Pathology* 50(4):512-530.

(478) Halasi M, **Nyska A**, Rubin L, Tal Y, Tsokos GC; Adini I (2022). Melanocyte-secreted Fibromodulin constrains skin inflammation in mice injected with lupus serum. *Clinical Immunology* (In Press) 2022 Aug;241:109055. doi: 10.1016/j.clim.2022.109055. Epub 2022 May 29

(479) Zandani G, Anavi-Cohen S, Assa-Glazer T, Sela N, Gorelick J, **Nyska A**, Bernstein N, Madar Z (2022). Cannabis Extracts Effects on Metabolic Parameters and Gut Microbiota Composition in a Mice Model of NAFLD and Obesity. *Evidence-Based Complementary and Alternative Medicine*. (In Press) <https://www.hindawi.com/journals/ecam/2022/7964018/>

(480) Nechooshtan T, Sharon Ehrlich, Arik Makovitzki, Eyal Dor, Hadar Marcus, Idan Hefetz, Shani Pitel, Lilach Cherry, Edith Lupu, Yehuda Sapir, Tzvi Holtzman, Moshe Aftalion, David Gur, Hadas Tamir, Yfat Yahalom-Ronen, Markku Saloheimo, Anne Huuskonen, Marilyn Wiebe, Marika Vitikainen, Yuval Ramot, Noam Kronfeld, **Abraham Nyska**, Mark Emalfarb, Ronen Tchelet, David Zarling, Anne Vallergera, Yakir Ophir (2022). Thermophilic Filamentous Fungus C1-Cell-Cloned SARS-CoV-2-Spike-RBD-Subunit-Vaccine Adjuvanted With Aldydrogel®85 Protects K18-hACE2 Mice Against Lethal Virus Challenge. *Vaccines* 2022, 10(12), 2119; <https://doi.org/10.3390/vaccines10122119>

(481) Ramot R, Vazana U, Cacical O, **Nyska A** (2023). Safety and Efficacy of a Novel Robotic, Fractional Micro-coring Device in a Swine Model. *J Toxicol Pathol* 2023; 36: 11–19. <https://pubmed.ncbi.nlm.nih.gov/36683728/>

(482) Maronpot R, Ramot R, **Nyska A**, Sproul C, Moore R, R, Bolon B, Hayashi S (2023). Oral chronic toxicity and carcinogenicity study of alpha-glycosyl isoquercitrin (AGIQ) in Sprague Dawley rats. *Regulatory Toxicology and Pharmacology* (In Press). May;140:105343. <https://pubmed.ncbi.nlm.nih.gov/36773715/>

- (483) Zandani G, Anavi S, Yudelevich T, **Nyska A**, Dudai N, Madar Z, Gorelick J (2022) Chiliadenus iphionoides reduces body weight and improves parameters related to hepatic lipid and glucose metabolism in a high-fat diet induce mice model of NAFLD. *Nutrients* 28;14(21):4552. <https://doi.org/10.3390/nu14214552>
- (484) Ramot Y, Rottenberg Y, Domb AJ, Kubek MJ, Williams KD, **Nyska A** (2023). Preclinical in-vivo safety of a novel thyrotropin-releasing hormone-loaded biodegradable nanoparticles after intranasal administration in rats and primates. *International Journal of Toxicology*. (In Press). Jan 12:10915818231152613. doi: [10.1177/10915818231152613](https://doi.org/10.1177/10915818231152613)
- (485) Suresh R Giri, Bibhuti Bhoi, Chitrang Trivedi, Akshyaya Rath, Rohan Rathod, Anish Sharma, Ramchandra Ranvir, Shekhar Kadam, Kailash Ingale, Hiren Patel, **Abraham Nyska**, Mukul R Jain (2023). Saroglitazar suppresses the hepatocellular carcinoma induced by intraperitoneal injection of diethylnitrosamine in C57BL/6 mice fed on choline deficient, l- amino acid- defined, high-fat diet. *BMC Cancer*. 17;23(1):59. doi: [10.1186/s12885-023-10530-0](https://doi.org/10.1186/s12885-023-10530-0)
- (486) Maria Naama, Shahar Telpaz, Aya Awad, Shira Ben-Simon, Sarina Harshuk-Shabso, Sonia Modilevsky, Elad Rubin, Jasmin Sawaed, Lilach Zelik, Mor Zigdon, Nofar Fadida, Sonda Turjeman, Michal Werbner, Supapit Wongkuna, Bjoern O Schroeder, **Abraham Nyska**, Meital Nuriel-Ohayon, View ORCID ProfileShai Bel (2023) Autophagy controls mucus secretion from intestinal goblet cells. *Cell Host & Microbe* (IN PRESS). <https://www.sciencedirect.com/science/article/pii/S1931312823000318?via%3Dihub>
- (487) Gorelick J, Assa-Glaze T, Zandani G, Altberg A, Sela N, **Nyska A**, Madar Z (2022) .THC and CBD affect metabolic syndrome parameters including microbiome in mice fed high fat-cholesterol diet. *Journal of Cannabis Research* 4:27 DOI: [10.1186/s42238-022-00137-w](https://doi.org/10.1186/s42238-022-00137-w)
- (488) Maronpot R, Ramot Y, **Nyska A**, Sproule C, Moore R, Koyanagi M, Chiba S, Nishino M, Hayashig SM (2023) Chronic toxicity and carcinogenicity study of dietary gardenia blue in Sprague Dawley rats. *Food and Chemical Toxicology* (In Press). <https://www.sciencedirect.com/science/article/pii/S0278691523001369>
- (489) Palazzi X, Barale-Thomas E, BawaB, Carter J, JanardhanK, Marxfeld H, **Nyska A**, Saravanan C, Schaudien D, Schumacher VL, Spaet RH, Tangermann S, Turner OC, Vezzali E (2023). Results of the European Society of Toxicologic Pathology Survey on the Use of Artificial Intelligence in Toxicologic Pathology. *Toxicologic Pathology* 51(4) 216–224 <https://journals.sagepub.com/doi/pdf/10.1177/01926233231182115>
- (490) Ben David N, Richtman Y, Gross A, Ibrahim R, **Nyska A**, Ramot A, Mizrahi B (2023). Design and Evaluation of Dissolvable Microneedles for Treating Atopic. Dermatitis. *Pharmaceutics* 15(4), 1109; <https://doi.org/10.3390/pharmaceutics15041109>
- (491) Anavi-Cohen S, Tsybina-Shimshilashvili N, Zandani G, Hovav R, Sela N, **Nyska A**, Madar Z (2023). Effects of High Oleic Acid Peanuts on Mice's Liver and Adipose Tissue Metabolic Parameters and Gut Microbiota Composition. *Frontiers Nutrition* (In Press). <https://pubmed.ncbi.nlm.nih.gov/37575334/>
- (492) Jackson ND, DVM, Palmanovich E, **Nyska A**, Nyska (2023). The Bio-integration Profile of Fiber-Reinforced Plates Following Tibial Implantation in Sheep. *Journal of Orthopaedic Research*. 42(2):360-372. <https://pubmed.ncbi.nlm.nih.gov/37593823/>

- (493) Ramot Y, **Nyska A**, Dvir M, Nedvetzki S, Rosenfeld S, Emanuel N (2024) Preclinical In-vivo Safety and Toxicokinetics of D-PLEX100 in an Abdominal Surgery Incision Model in Juvenile Miniature Swine. *International Journal of Toxicology* 43(1):19-26
<https://pubmed.ncbi.nlm.nih.gov/37787596/>
- (494) Ramot R, Levin-Harrus Ezratty AT, Steiner M, Ezov N, Domb A, Abd El-haqM, Shohat S, Aperman L, Adler L, Dolkart O, **Nyska A** (2024). Assessment of Bioprotect's Biodegradable Balloon System as a Rectal Spacer in Radiotherapy: An Animal Study on Tissue Response and Biocompatibility. *Pharmaceutics* (In Press). 2023 Dec 7;15(12):2744.
<https://doi.org/10.3390/pharmaceutics15122744> .
- (495) Ramot Y, Kronfeld N, Steiner M, Nseir NM, Amir Bahar A, **Nyska A** (2024). Neural Tissue Tolerance to Synthetic Dural Mater Graft Implantation in a Rabbit Durotomy Model. *Journal of Toxicologic Pathology* 37(2):83-91. <https://pubmed.ncbi.nlm.nih.gov/38584968/>
- (496) Sonnenfeld T, Rauchbach E, Downey R, Blumenkrant D, Hasson A, Kuperstein G, Kronfeld N, Margalit R, Molakandov K, Morad V, **Nyska A**, Slutsky SG, Revel M, Izrael M (2024). Toxicity Studies on Intrathecal Injection of Low Dose of DMSO Used for Cryopreservation of Human Astrocytes in Mice. *Journal of Clinical Toxicology* Vol.13 Iss.6 No:1000553 (In Press).
<https://www.longdom.org/open-access/toxicity-studies-on-intrathecal-injection-of-low-dose-of-dmsol-used-for-cryopreservation-of-human-astrocytes-in-mice.pdf>
- (497) Shapira T, **Nyska A**, Domb A(2024). Biocompatibility of Insulin-PLA Stereocomplex. *Journal of Bioactive and Compatible Polymers*. (In Press).
<https://journals.sagepub.com/doi/abs/10.1177/08839115241241047>
- (498) Ankri C, Hershkovitz O, Hershkovitz L, Bami M, Levy R, Sarig H, Souli E,Reicher B, Amor-Baroukh V, Mevorach D, **Nyska A** (2024). Safety of repeated administration of xenogeneic human apoptotic state (Allocetra-OTS) in Sprague Dawley rats. *Pharmaceutics* (In Press).
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10975356/>
- (499) Buaron N, Mangraviti A., Wang Y, Liu A., Pedone M., Sankey E., Adar I., **Nyska A.**, Goldbart R., Traitel T., Brem H., Tyler B., Kost J. (2024). Ultrasound inhibits tumor growth and selectively eliminates malignant brain tumor in vivo. *Bioengineering & Translational Medicine* (In Press). *Bioeng Transl Med.* 2024 Apr 1;9(5):e10660. doi
<https://aiche.onlinelibrary.wiley.com/doi/full/10.1002/btm2.10660>
- (500) Ramot Y, Karakuz V, Willenz EP, Alon T, Zilberman Barzilai D, Beer O, **Nyska A** (2024). Comprehensive Evaluation of the BeShape One Device: Assessing Thermal Safety in Non-Invasive Body Contouring Using Advanced Techniques. *Lasers in Surgery & Medicine*. 2024 Aug;56(6):581-591 <https://onlinelibrary.wiley.com/doi/10.1002/lsm.23818>
- (501) Ramot Y, Kronfeld N, Steiner M, Lee ED, Goldberg R, Jahn S, **Nyska A** (2024). Biocompatible Solutions: Evaluating the Safety of Repeated Intra-Articular Injections of pMPCylated Liposomes for Knee Osteoarthritis Therapy in Rat Models. *Toxicologic Pathology* 52(5):266-283
- (502) Man D, Bar-Shai N, Levkov K, Gabay B, Vitkin E, **Nyska A**, Yarmush M, Shalom A, Golberg A (2024) Treating scars after burns with pulsed electric fields in the rat model. *Journal of Burn Care and Research* 14;45(6):1553-1565. doi: 10.1093/jbcr/irae154
<https://pubmed.ncbi.nlm.nih.gov/39109993/>
- (503) Funk K, Schuh J, Bolon B, Thomas V, Everitt JJ, **Nyska A**, Paulin J (2025). Pathology as a core discipline in the biological evaluation of medical devices . *International Journal of Toxicology* 2026 Mar-Apr;45(2):157-170

(504) Grande N, Jeppesen G, **Nyska A** (2024). Intra-abdominal abscesses in two Göttingen minipigs. *Toxicologic Pathology* 2024 Aug;52(6):350-352.

<https://doi.org/10.1177/01926233241289112> <https://pubmed.ncbi.nlm.nih.gov/39417580/>

(505) Elmore SA, Berry C, Bolon B, Boorman GA, Bradley AE, Cohen SA, Klaunig JE, Kluxen FM, Maronpot RR, **Nyska A**, Papenfuss TL, Rehg JE, Resnik DR, Rietjens IMCE, Rosol TJ, Suttie AW, Schoeb TR, Strupp C, Thoolen B, Weber K. (2024). Conflicts of Interest in the IARC Process of Identifying Carcinogenic Hazards to Humans. *Human and Experimental Toxicology*. 44:9603271241269020. doi: 10.1177/09603271241269020.

<https://journals.sagepub.com/doi/full/10.1177/09603271241269020>

(506) Fahoum L; Moshe-Belisowski S; Zaydel K; Ghatpande N; Guttmann-Raviv N; Zhang W; Li K; Tong WH; **Nyska A**; Waterman M; Weisshof R; Zuckerman A; Meyron-Holtz EG (2024) Iron Regulatory Protein 1 is Required for the Propagation of Inflammation in Inflammatory Bowel Disease. *Journal of Biological Chemistry*. 300(9):107639. doi: 10.1016/j.jbc.2024.107639. Epub 2024 Aug 7. PMID: 39122013 <https://pmc.ncbi.nlm.nih.gov/articles/PMC9928023/#S12>

(507) Cole BJ, Easley JT, **Nyska A**, Rousselle S, DVM (2024). Anterior Cruciate Ligament Reconstruction in a Translational Model in Sheep Using Biointegrative Mineral Fiber Reinforced Screws. *Scientific Reports* 9;14(1):27408. doi: 10.1038/s41598-024-75914-z

<https://pubmed.ncbi.nlm.nih.gov/39521891/>

(508) Ibrahim R, **Nyska A**, Elmore SA, Boyle M, Ramot Y (2025). Review article: Interpretative Challenges in Animal Studies: Review of Case Studies and Implications for Toxicologic Pathology. *Toxicologic Pathology* 53(5):440-455. doi: 10.1177/01926233251322767

<https://doi.org/10.1177/019262332513227>

(509) Ramot Y, Steiner M, Vazana U, Nahear R, Suliman N, Friedman DJ, Noach S, **Nyska A**. Safety and Efficacy of a 1940 nm Tm:YAP Laser for Fractional Skin Ablation in a Swine Model (2025). *Lasers in Surgery and Medicine*, 2025; 57:405–414

<https://doi.org/10.1002/lsm.70022>

(510) Ramot Y, Hillel S, Mussan M, Manor R, **Nyska A** (2025). Thermal Effects of the Anovo® Instrument ARMs Hook Electrode and Curved Scissors: An Ex Vivo Study of Safety and Precision in Monopolar Electrosurgery. *BMC Surgery* 2025 May 29;25(1):236.

<https://bmcsurg.biomedcentral.com/articles/10.1186/s12893-025-02969-8>

(511) Bar-Shai N, Mann D, Lesman A, Shalom A, **Nyska A**, Golberg A (2025). Sustainable Seaweed-Derived Cellulose Scaffolds for Tissue Engineering Applications: Biocompatibility and Structural Insights. *Scientific Reports* 15(1):35667. doi: 10.1038/s41598-025-19632-0.

(512) Ramot Y, Steiner M, Vazana U, **Nyska A**, Horev A (2025). VIVA Stent Preclinical Evaluation in Swine: A Novel Cerebral Venous Stent with Unique Delivery System. *Journal of Clinical Medicine* 14(13), 4721; <https://doi.org/10.3390/jcm14134721>

(513) Aginsky R, Leblang S, Miller E, Skoglund B, **Nyska A**, Rebhun N, Gofeld M, Aubry JF, Hananel A (2025). High intensity focused ultrasound periosteal ablation in an animal model: Potential for palliation of bone metastases. *International Journal of Hyperthermia* 42(1):2543330. doi: 10.1080/02656736.2025.2543330. Epub 2025 Aug 7. PMID: 40775539.

(514) Funk KA, Schuh JCL, Bolon B, Thomas V, Everitt JI, **Nyska A**, Paulin J (2025). Optimization of the Nonclinical Biological Evaluation of Medical Devices Using Toxicologic Pathology Best Practices. *Advanced Healthcare Materials* 15(3):e01690. doi: 10.1002/adhm.202501690.

(515) Funk KA, Schuh JCL, Bolon B, Thomas V, Everitt JI, **Nyska A**, Paulin J (2025). Pathology as a Core Discipline in the Biological Evaluation of Medical Devices. *International Journal of Toxicology*. 45(2):157-170. doi: 10.1177/10915818251388381. Epub 2025 Nov 21. PMID: 41269675.

(516) Ramot Y, Andreini A., Sacco G., Becker J., Bruhn B, Manno RM, **Nyska A** (2026). Preclinical safety evaluation of BB106, a novel ketamine–sulfobutylether-beta-cyclodextrin salt, following subcutaneous administration in rats and Göttingen minipigs. *International Journal of Toxicology* May-Jun;45(3):232-246. doi: 10.1177/10915818251414705. Epub 2026 Jan 20. PMID: 41557945; PMCID: PMC13156416.

(517) El-haq MA, Kumar A, Ramot R, Aperman L, Adler L, Sarig A, Ginat N, **Nyska A**, Domb AJ (2026) Biodegradation of Tissue Separation Balloon Spacer Implant. *Israel Journal of Chemistry* Volume 105, October 2016, Pages 109-116

(518) Damouny CW, Matta N, Haq MA, **Nyska A**, Siman P, Domb AJ (2026). Injectable Cisplatin-Loaded Biodegradable Poly(anhydride-ester) for Treating Head and Neck Cancer-Preclinical Studies. *ACS Biomaterials Science & Engineering* 12 (2), 1008-1017 DOI: 10.1021/acsbiomaterials.5c01699

(519) Ramot R, Lioz R, Levin-Harrus T, **Nyska A** (2026). Preclinical safety evaluation of the LapBox Power Tissue Containment System under simulated worst-case conditions in a porcine model. *Surgical Innovation* (In Press). 2026 Jan 8:15533506261415989. doi: 10.1177/15533506261415989. Online ahead of print.

(520) Kadu HA, Rajwadi VI, Shah JV, Chauhan VB, Panchal PP, Bhatt LK, Patel JH, Ranvir RK, Patel H, Trivedi RR, Kusmider B, Tornesi B, **Nyska A**, Sundar R, Jain MR. (2026) Juvenile toxicity and developmental safety of Zintrodiazine, a novel antimalarial candidate, in Wistar rats. *J Antimicrob Chemother.* 81(2):dkag008. doi: 10.1093/jac/dkag008. PMID: 41603569.

(521) Ramot R, Steiner M, Kronfeld N, Fishman-Jacob T, Timaner M, **Nyska A** (2026). Toxicologic Evaluation of RC-0315, a Mesenchymal Stem Cell-Derived Secretome, Following Repeated Intratracheal Administration in Mice. *Toxicologic Pathology* (In Press)

(522) Dubinsky D, Harel S, Bein A, **Nyska A**, Ya'ari S, Koc B, Anas F, Bentwich I, Wolf L(2026). Non-Invasive Quantification of Viability in Spheroids Using Deep Learning. *Frontiers in Bioengineering and Biotechnology* Vol 14. (In Press)
https://www.frontiersin.org/journals/bioengineering-and-biotechnology/articles/10.3389/fbioe.2026.1797474/full?utm_source=F-NTF&utm_medium=EMLX&utm_campaign=PRD_FEOPS_20170000_ARTICLE

(523) Veig Mendel L, Sacks Z, **Nyska A**, Raz-Prag D, Kleinmann G (2026) Clinical and Histopathological Evaluation of Maximal and Supramaximal Energy Direct Selective Laser Trabeculoplasty (DSLTL): A Rabbit Model Safety Study. *Lasers in Surgery and Medicine* (In Press). <https://pubmed.ncbi.nlm.nih.gov/42335307/>

- (524) Jain PK, Bhatt LK, Patel AK, Patel S, Patani KZ, Patel RJ, Dwivedi P, Kadam SB, Ranvir RK, Patel HM, Chatterjee A, Gupta L, Giri P, Patel H, **Nyska A**, Sundar R, Jain MR. Saroglitazar, a novel PPAR- α/γ agonist, modulates thyroid hormone homeostasis through hepatic UGT expression in wistar rats. *Chem Biol Interact.* 2026 May 9:112135. doi: 10.1016/j.cbi.2026.112135. Epub ahead of print. PMID: 42114667.
- (525) Ramot Y, Orr T, MD, Zilberman Barzilai 4D, Willenz U, Beer O, Siman Tov Y, Luria D, **Nyska A** (2026). Safety and performance of vibration-assisted extraction of chronic cardiac implantable electronic device leads: A pre-clinical ovine study. (In Press) *Heart Rhythm* <https://www.sciencedirect.com/science/article/abs/pii/S154752712602518X>
- (526) Spero Z, Vazana U, Burg-Golani T, **Nyska A.** (2026) A Standardized Procedure for Post-Mortem Harvesting of the Brain and Rete Mirabile in Domestic Porcine. *Toxicologic Pathology* (In Press). <https://pubmed.ncbi.nlm.nih.gov/42947499/>
- (527) Ramot Y, Harel Adar T, Lavie Y, Ben Neriah T, Steiner M, Saar A, Tzelik S, Ben-Mordechai T, Goldner R, **Nyska A** (2026) Characterization of the Athymic Nude Rat Dorsal Corticospinal Tract Transection Model for Assessing Tumorigenicity of Human Cell-Based Therapeutics. *Toxicologic Pathology* (In Press).
- (528) Ramot Y, **Nyska A**, Kronfeld N, Cohen E, Brambilla I, Lamb C, Laub O (2026) Preliminary Evaluation of the Local Tissue Response, Biocompatibility, and Dural Repair of sFilm-FS, a Novel Bioabsorbable Fibrin Sealant, in a Rabbit Dural Defect Model. *International Journal of Toxicology* (In Press).
- (529) Gorelick J, Abutbul T, Aouizerat T, Basteker A, Obanda D, Tirosh O, Sela N, **Nyska A**, Madar Z (In Press). Beyond the Extract: Raw Nettle Preparations Outperform Ethanol Concentrates in Improving Hepatic Steatosis, Inflammation, and Gut Microbial Profiles in Diet-Induced MASLD. *Nutrients* (<https://www.mdpi.com/journal/nutrients>)

CHAPTERS IN BOOKS

- (1) Nyska A, Waner T, Zlotogorski A, Nyska M, Pirak M, Scolnik M, Galiano A (1991). Animal Model of Human Disease - Oxodipine-induced gingival hyperplasia in beagle dogs. In: *Animal Models of Human Disease*, 18th fascicle, The registry of comparative pathology, Armed Forces Institute of Pathology, Washington, D.C.
- (2) **Nyska A**, Maronpot RR (1999). Pathology of the adrenal gland. In: RR Maronpot, *Pathology of the Mouse*, Cache River Press, Vienna, Illinois, pp. 509-537.
- (3) Lomnitski L, **Nyska A**, Michelson D (2000). Transgenic and knockout mice with neuropathological disorders. In: JM Ward, JF Mahler, RR Maronpot, JP Sundberg, *Pathology of Genetically-engineered Mice*, Iowa Academic Press, Ames, Iowa, pp. 253-268.
- (4) **Nyska A**, Brix AE, Jokinen MP, Sells DM, Wyde ME, Orzech D, Haseman JK, Flake G, Walker NJ (2004). Chemically induced exocrine degeneration, atrophy and arterial diseases in rats. In: PM Pour (ed.), *Toxicology of the Pancreas; Biology, Pathophysiology, Etiology and Molecular Biology of Pancreatic Injury*. Raven Press.

(5) Trouba KJ, **Nyska A**, Styblo M, Dunson D, Lomnitski L, Grossman S, (2003). Effect of antioxidants on the papilloma response and liver glutathione modulation mediated by arsenic in Tg.AC transgenic mice. In: Chappell WR, Abernathy CO, Calderon RL, ed.) *Arsenic Exposure and Health Effects V*. Amsterdam: Elsevier Science Ltd, pp. 281-291.

(6) Ramot Y, Goldschmidt N, **Nyska A** (2007). Chapter: "Drug-Induced Thrombosis" In: "Lang F, Encyclopedic Reference of Molecular Mechanisms of Disease". Springer, Germany.

(7) Yoshizawa K, **Nyska A** (2007). Chapter: "Toxic heart muscle diseases" In: "Lang F, Encyclopedic Reference of Molecular Mechanisms of Disease". Springer, Germany.

(8) Teoh E, Paddada SD, Wormser U, **Nyska A**. (2007). Statistical inference under order restrictions on both rows and columns of a matrix, with an application in toxicology. Edited by N. Balakrishnan, E. Pena and M. J. Silvapulle. IMS Lecture Notes-Monograph Series, Institute of Mathematical Statistics. Hayward, California.

(9) Rodney A. Miller, Nigel J. Walker, Katsuhiko Yoshizawa, Amy E. Brix, Donald Sells, Micheal P. Jokinen, Michael Wyde, and **Abraham Nyska** (2008). In: "Classic Examples in Toxicologic Pathology", Title: Dioxin (and Dioxin-like Compounds)-Induced Lung Lesions, European Society of Toxicologic Pathology, Hannover, Germany.

(10) Elmore, S. A., **Nyska, A.** and Tischler, A. S. (2009). The Adrenal Medulla as a Target Organ in Toxicologic Studies of Rats and Mice. Edited by Philip Harvey, David Everett and Christopher Springall in: Target Organ Toxicology Series, volume 26 (Series Editors John A Thomas, A Wallace Hayes and Donald E Gardner, CRC Press/Taylor and Francis). pages 111-138

(11) Tischler, A. S., **Nyska, A.** and Elmore, S. A. (2010). Toxic Responses of the Adrenal Medulla in: Volume 11 of Comprehensive Toxicology, 2nd Edition Edited by I. Glenn Sipes, Charlene A. McQueen and A. Jay Gandolfi. Elsevier, New York, NY. Pages 291-311

(12) Maronpot RR, **Nyska A** (2021). Chapter 1 – Introduction to Toxicologic Pathology - The discipline of toxicologic pathology. Editors: Sahota PA, Spaet RH, and Wojcinski ZW, Title of the book: entitled "Toxicologic Pathology: A Primer". CRC Press/Francis-Taylor Publishers .

(13) Ibrahim R, **Nyska A**, Ramot Y (2023). Biocompatibility of Polymers. In: Shady Farah, Boaz Mizrahi, Avi Domb, Biomaterials Textbook , Springer Nature.

https://trebuchet.public.springernature.app/get_content/a5b5a41b-a5fd-4ca2-bf1f-f8317822ca47?sap-outbound-id=03F2547D87FF3BCD7A58F52577356EE7A6FCCFC8&utm_source=standard&utm_medium=email&utm_campaign=000_LAN36_0000019083_Book%20author%20congrats%20NEW&utm_content=EN_34155_20230927&mkt-key=42010A0553051EDBB9CD1E4083C4D0DF

PRESENTATIONS AT SCIENTIFIC MEETINGS PUBLISHED AS ARTICLES IN THE PROCEEDINGS OF THE SYMPOSIA

(1) Wormser U, Ben Zakine S, Stivelband E, **Nyska A** (1989). The liver slice system: A simple acute toxicity test for evaluation of hepatotoxic agents. *Alternative Methods of Toxicology, In Vitro Toxicology – New Directions*, Baltimore, Maryland.

(2) Wormser U, Ben-Zakine S, Eisen O, **Nyska A** (1990). The liver slice system: A rapid and simple acute toxicity test for assessment of environmental toxic substances. *2nd International Conference on Environmental Chemistry*, Honolulu, Hawaii.

(3) Zlotogorski A, Waner T, **Nyska A** (1990). Gingival hyperplasia induced by calcium channel blockers. Calcium channel modulators in heart and smooth muscle: basic mechanisms and pharmacological aspects. 33rd *Oholo Conference*, Eilat, Israel.

(4) **Nyska A** (1991). Folpet: e' cancerogeno per l'uomo? Folpet and Captan - Aspetti applicativi e situazione legislativa. (In Italian) *Atti del Simposio Promossa Dalla Makhteshim Chemical Works*, Ospedaletto di Pescantina, Italy.

(5) Wormser U, Raibstein I, Kritzler JS, **Nyska A** (1993). *In vitro* bioassay for detection and monitoring exposure to environmental neurotoxins. *World Congress of Alternatives for Animal Use in Life Science*, Baltimore, Maryland.

(6) Ersov E, Ballaiche M, Hanji V, Sobak S, Gyps M, **Nyska A**, Shlosberg A (1995). The effect of monensin, mediated by hepatic mixed function oxidases, on blood levels of sulfadimethoxine in broiler chickens. 44th *Western Poultry Disease Conference*, Sacramento, California.

(7) Raif J, Zair E, Levavi H, **Nyska A** (1995). The evolution of char-free laser surgery - from CW to SP to Sharpulse™ and SwiftLase™. *Biomedical Optoelectronic Instrumentation, SPIE -The International Society of Optical Engineering*, San Jose, California.

(8) Hoffman A, Shaked I, **Nyska A**, Avramoff A, Golomb G (1995). Characterization of the uterus as a site of drug administration for systemic effect. 1st *World Meeting on Pharmaceutics, Biopharmaceutics, and Pharmaceutical Technology*, Budapest, Hungary.

(9) Hoffman A, Shaked I, **Nyska A**, Avramoff A, Golomb G (1995). Trans-endometrial route of drug administration: in vitro and in vivo evaluation. *International Symposium on Controlled Release of Bioactive Materials*, Controlled Release Society, Inc., Washington DC.

PRESENTATIONS AT SCIENTIFIC MEETINGS PUBLISHED AS ABSTRACTS IN THE PROCEEDINGS OF THE SYMPOSIA AND/OR IN SCIENTIFIC JOURNALS OF THE RELEVANT SOCIETIES

- (1) **Nyska A**, Perl S, Klopfer U, Nobel TA (1978). A separate anatomo-pathological syndrome of Salmonellosis in calves. *3rd Symposium of Veterinary Medicine*, Rehovot, Israel.
- (2) Klopfer U, Kuttin E, Perl S, **Nyska A**, Nobel TA (1979). Bovine farcy in Israel. *4th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (3) **Nyska A** (1980). A congenital arthrogryposis and hydroencephaly in domestic animals - Akabane disease: A review. *National Congress of Ovine Pathology*, Pisa, Italy.
- (4) Perl S, Nobel TA, Klopfer U, **Nyska A** (1980). Histopathological changes in genital organs of besnoitia infected cows. *5th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (5) Klopfer U, Perl S, **Nyska A**, TA Nobel (1980). Spontaneous bleeding in the thymus as a cause of sudden death in dogs. *5th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (6) **Nyska A**, Finn JP, Kuttin E (1981). Spontaneous aspergilloma in nasal cavity of rats. *6th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (7) Brenner G, Perl S, Klopfer U, **Nyska A**, Yacobson B (1981). Bovine renal amyloidosis. *6th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (8) Perl S, **Nyska A**, Klopfer U (1981). Gastric nematodes in horses and mules. *6th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (9) Kuttin ES, Feldman M, **Nyska A**, Nobel TA (1982). Modifications of gram stain to demonstrate Actinomyces and Nocardia species in tissues. *11th Triennial World Congress of the World Association of Societies of Pathology*, Jerusalem, Israel.
- (10) **Nyska A**, Kuttin ES (1982). Sialodacryoadenitis disease in rats. *7th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (11) Birnbaum S, Chari-Bitrun A, **Nyska A**, Millo S (1982). Rats exposed to phosphate rock aerosols - biochemical and histopathological changes. *23rd Annual Meeting of The European Society of Toxicology*, Tel Aviv, Israel.
- (12) Ashkenazy D, Friedman J, Kashman Y, **Nyska A** (1983). Triradiatus as natural protectant against grazing. *3rd European Ecological Symposium*, Lund, Sweden.
- (13) **Nyska A**, Izhak RB (1983). Ocular pathology induced by Pituranthus triradiatus associated with sunlight exposure. *National Medical Week*, Jerusalem, Israel.
- (14) **Nyska A**, Izhak RB (1983). Retinal atrophy manifested through photosensitization in albino rats, induced by Pituranthus triradiatus. *1st Annual Symposium of Life Science Societies*, Jerusalem, Israel.
- (15) Birnbaum S, Chari-Bitrun A, **Nyska A**, Millo S (1983). Biochemical and histopathological changes in rats exposed to phosphate rock aerosols. *8th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (16) **Nyska A**, Nyska M, Porat S (1984). Improvement of gliding function following flexor tendon injury by topical application of enriched collagen solution - histopathological evaluation. *9th Symposium of Veterinary Medicine*, Rehovot, Israel.

- (17) Perl S, Shlosberg A, **Nyska A** (1984). Possibility of bovine monensin toxicosis and differential diagnosis. *9th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (18) Fields S, Porat S, Nyska M, **Nyska A** (1984). C.T. assessment of partial epiphyseal plate closure. *70th Annual Meeting of the Radiological Society of North America*, Washington, DC.
- (19) **Nyska A**, Kuenberg V, Scolnik S, Zukerman A (1985). Histochemical and quantitative evaluation of splenic haemosiderosis. *10th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (20) **Nyska A**, Izhak RB (1985). Spontaneous ocular malformations in CD rats. *Regional Scientific Meeting on Laboratory Animals and the Advancement of Science*, Jerusalem, Israel.
- (21) Nyska M, **Nyska A**, Porat S, Shoshan S (1985). Histological evaluation of improvement of gliding function of flexor tendon by topical application of enriched collagen solution. *Annual Meeting of Hand Surgery*, Naharia, Israel.
- (22) Fields S, Porat S, Nyska M, **Nyska A** (1986). Computerized tomography of experimental bony bridge in rabbit tibial epiphyses. *Annual Meeting of the European Pediatric Orthopaedic Society*, London, England.
- (23) Porat S, Nyska M, **Nyska A**, Fields S (1986). Computerized tomography scanning of experimental bony bridge in rabbits' proximal tibial physis with histological confirmation. *Pediatric Orthopedic Society of North America*, Boston, Massachusetts.
- (24) **Nyska A**, Klein B (1986). Renal cortical cysts as a preneoplastic stage - an experimental model. *11th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (25) **Nyska A**, Klein B, Scolnik M, Bracha P (1986). Intestinal reflux of Folpan as a cause of gastric neoplasia. *NATO Advanced Study Institute - Toxicology of Pesticides*, Riva del Garda, Italy.
- (26) Nyska M, **Nyska A**, Porat S, Fields S (1986). Assessment of partial epiphyseal plate closure by computerized tomography and histologic evaluation. *11th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (27) Kuehnberg M, **Nyska A**, Waner T, Zukerman A (1986). Splenic hemisiderosis: A quantitative histochemical evaluation by means of an automatic image analysis. *Quantiment Image Analysis Users Conferences*, Cambridge, England.
- (28) Pirak M, **Nyska A**, Waner T (1987). Thyroid hyperactivity and hepatic microsomal induction. *12th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (29) **Nyska A**, Scolnik M, Klein B, Bracha P (1987). Gastric irritative tumorigenesis following duodenal experimental cancerous obstruction. *12th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (30) **Nyska A**, Pirak M, Waner T, Scolnik M (1987). Chemical hepatic microsomal induction as a cause of thyroid hyperactivity. *28th Congress of The European Society of Toxicology*, Strasburg, France.
- (31) Pirak M, **Nyska A**, Scolnik M, Waner T (1988). Mucous secretion in Fischer F344 rat rectal mucosa during carcinogenesis induced by a pesticide - a morphological and histochemical study. *13th Symposium of Veterinary Medicine*, Rehovot, Israel.
- (32) **Nyska A**, Waner T, Pirak M, Scolnik M, Nobel TA, Nyska M, Zlotogorski A, Sela M, Galiano A (1988). Effect of oxodipine as an animal model of studying drug-induced gingival hyperplasia. *13th Symposium of Veterinary Medicine*, Rehovot, Israel.

- (33) Shapira Z, Terkel J, Egozi J, **Nyska A**, Friedman J (1988). Preliminary studies in determining the potential of indigenous plants to regulate reproduction. *Annual Meeting of the Israel Society of Botany*, Jerusalem, Israel.
- (34) Scolnik M, Pirak M, Waner T, **Nyska A** (1988). Morphological and histochemical study of mucous secretion in rat rectal mucosa during experimental carcinogenesis. *8th International Congress of Histochemistry and Cytochemistry*, Washington DC.
- (35) Klein B, Klein T, Kunizevsky M, **Nyska A**, Luria H, Livni E (1988). The HLA class I expression as a possible marker for staging of testicular carcinoma. *18th Annual Meeting of Israel Society of Immunology*, Beer Sheva, Israel.
- (36) Laor O, Waner T, Galiano A, **Nyska A** (1988). Recovery from gingival hyperplasia induced by oxodipine, a calcium channel blocker. *29th Congress of the European Society of Toxicology*, Munchen, West Germany.
- (37) Klein T, Kunizevsky M, **Nyska A**, Luria H, Livni E, Klein B (1988). The expression of HLA Class I antigens in germ cell testicular cancer. *1st Congress of the Israel Cancer Association* (on innovations in cancer research), Jerusalem, Israel.
- (38) Swiesa-Sivan A, Simkin A, Leichter I, **Nyska A**, Nyska M, Statter M, Bivas A, Samueloff S (1988). The effect of chronic swimming on bone remodelling. *The American College of Sports Medicine Meeting*, Dallas, Texas.
- (39) Gordon EB, Kuehnberg W, Waner T, Zuckerman A, Scolnik M, **Nyska A** (1989). Automatic image analysis of splenic hemosiderin deposition in rats. *American Society of Toxicology Annual Meeting*, Atlanta, Georgia.
- (40) Klein B, Klein T, **Nyska A**, Loven D, Lorine H, Livni E (1989). The effect of in vitro irradiation on the expression of HLA class I and class II in brain tumours. *17th International Congress of Radiology*, Paris, France.
- (41) **Nyska A**, Waner T, Pirak M, Scolnik M, Galiano A, Zlotogorski A (1989). Common side effects of calcium antagonists in humans and laboratory animals. *33rd Oholo Conference on Calcium Channel Modulators in Ischemic Heart Disease and Other Cardiovascular Disorders*, Eilat, Israel.
- (42) Swissa-Sivan A, Simkin A, Statter M, **Nyska A**, Samueloff S, Menczel J (1989). The effect of chronic swimming on bone modelling. *Conference on the Biology of Ageing*, Tiberias, Israel.
- (43) **Nyska A**, Pirak M, Waner T, Albeck M, Sredni A (1989). Ocular toxicity of AS-101, a new tellurium-based immunomodulator drug. *8th International Symposium of the Society of Toxicologic Pathologists*, Cincinnati, Ohio.
- (44) **Nyska A**, Nyska M, Wolter K, Waner T (1989). TNCA: A potential drug for use in treatment of osteoporosis-like disorders - its effectiveness in rats. *14th International Symposium of Veterinary Medicine*, Rehovot, Israel.

(45) Waner T, Yuval D, **Nyska A** (1989). Electronic measurement of canine mean platelet volume under different storage conditions. *14th International Symposium of Veterinary Medicine*, Rehovot, Israel.

(46) Klein B, Klein T, Kunizevsky M, **Nyska A**, Levi I, Zamir R, Livni E, Lurie H (1989). The expression of HLA class I antigens in germ cell testicular cancer. *25th Annual Meeting, American Society of Clinical Oncology (ASCO)*, San Francisco, California.

(47) Klein B, Klein T, Figer A, **Nyska A**, Swartz A, Livni E, Levin I, Lurie H (1989). The expression of HLA class I and II antigens in gastric carcinoma. *25th Annual Meeting, American Society of Clinical Oncology (ASCO)*, San Francisco, California.

(48) Nyska M, Sperber AD, Howard CB, **Nyska A**, Dekel S (1989). Ankle extensor tendon synovitis due to a date palm thorn. *5th International Seminar on the Treatment of Rheumatic Diseases*, Tel Aviv, Israel.

(49) Lieberman N, Nyska M, **Nyska A**, Dekel S, Segal S (1990). The influence of various arms of the immune system on fracture healing. *3rd International Workshop on Cells and Cytokines in Bone and Cartilage*, Davos, Switzerland.

(50) Nyska M, **Nyska A**, Waner T, Wolter K (1990). The effect of thionaphthene-z-carboxylic acid (TNCA) on bone mass in the rat. *3rd International Workshop on Cells and Cytokines in Bone and Cartilage*, Davos, Switzerland.

(51) **Nyska A**, Pirak M, Scolnik M, Waner T (1990). Tissue polypeptide antigen (TPA) in rat normal hyperplastic and neoplastic urinary bladder. *9th International Symposium of The Society of Toxicologic Pathologists*, Ottawa, Canada.

(52) Pirak M, Waner T, Scolnik M, **Nyska A** (1990). Two rare tumors in the rat: choriocarcinoma in a male and uterine granular cell tumor. *15th Veterinary Symposium*, Rehovot, Israel.

(53) Wormser U, Zakine SB, **Nyska A** (1990). Furosemide-induced hepatic metallothioneine synthesis in the rat and mouse. *The 1990 Eurotox Meeting*, Leipzig, Germany.

(54) Dayan D, Wolman M, Tal H, Waner T, **Nyska A** (1991). Oxodipine induced gingival hyperplasia in beagle dogs: polarizing microscopy of picosyrus red stained collagen. *3rd International Jerusalem Symposium on Extracellular Matrix Macromolecules*, Jerusalem, Israel.

(55) Shapira Z, Terkel J, Egozi J, **Nyska A**, Friedman J (1991). Laboratory tests in order to confirm the effects of desert plants for birth control. *2nd Israeli Congress on Medicinal Plants*, Tel Aviv, Israel.

(56) **Nyska A**, Waner T, Wormser U, Dayan D (1991). The chronic dermal toxicity tests- pathology associated with bandaging technique. *The 1991 Eurotox Meeting*, Maastricht, The Netherlands.

(57) Zusman I, Zimber A, Madar A, **Nyska A** (1992). Role of different pathological methods in early detection of tumorigenic effects on the rat colon of chemical carcinogens. *17th Veterinary Symposium*, Rehovot, Israel.

(58) **Nyska A**, Waner T, Wormser U, Dayan D (1992). Lipid pigment (lipofuscin) accumulation within untreated atrophic retina following 3 months of occlusive dressing. *11th International Symposium of Toxicologic Pathologists*, Phoenix, Arizona.

(59) Weisman Y, Malkinson M, Lublin A, Zuckerman A, **Nyska A** (1993). Computerized image analysis of bursae of fabriceus of chickens infected with virulent and vaccine strains of infectious bursal

disease virus. *30th Annual Convention of The Israel Branch of the World Poultry Science Association*, Zichron Yaakov, Israel.

(60) Waner T, Nyska A (1993). The influence of fasting blood, glucose, triglycerides, cholesterol and alkaline phosphatase in rats. *Meeting of The European Comparative Clinical Pathology Group*, Nottingham, England.

(61) Nyska A, Skolnick M, Ziv G, Gulkarov A (1993). Histopathological findings in the skeletal muscle of turkeys following injection of the anti-bacterial agent - quinabic 7%. *19th Annual Veterinary Symposium*, Beit-Dagan, Israel.

(62) Nyska A, Waner T (1993). The issue of non-genotoxic chemical carcinogens - a new perspective, *19th Annual Veterinary Symposium*, Beit-Dagan, Israel.

(63) Nyska A, Zuckerman A, Weisman Y, Malkinson M, Lublin A (1993). Use of image analysis for the standardization of infectious bursal disease virus vaccines. *12th Annual Meeting of The Israeli Society of Histochemistry and Cytochemistry*, Rehovot, Israel.

(64) Dayan D, Wolman M, Tal H, Waner T, Nyska A (1993). Oxodipine induced gingival hyperplasia in beagle dogs: polarizing microscopy of picrosyrius red stained collagen. *12th Annual Meeting of The Israeli Society of Histochemistry and Cytochemistry*, Rehovot, Israel.

(65) Kaplun A, Hirshberg A, Nyska A, David Y, Shahar A (1993). Effect of histoacryl on prevention of serosal adhesions - scanning electron microscopy of mesothelial healing in mice. *12th Annual Meeting of The Israeli Society of Histochemistry and Cytochemistry*, Rehovot, Israel.

(66) Nyska A, Hadani A, Zuckerman A, Raif J (1993). An histologic and morphometric study in normal guinea pig brain tissue following Nd:YAG laser beam irradiation - the acute changes. *12th International Symposium of The Society of Toxicologic Pathologists*, Washington DC.

(67) Liberman V, Angel S, Lublin F, Shkolnik T, Nyska A, Kashtan H, Trostler N, Rozen P (1993). A study of large bowel carcinogenesis using human diet in an animal model. *The Annual Meeting of The Tel-Aviv University*, Eilat, Israel.

(68) Madar A, Cohen E, Pollack A, Nyska A (1993). Effect of CS-045 on cataract appearance in sand rat model for diabetes type II. *53rd Annual Meeting and Scientific Sessions, American Diabetes Association*, Las Vegas, Nevada.

(69) Green B, Arad-Yellin R, Wormser U, Nyska A (1993). Histopathology of 2-chloroethyl sulfides. Towards detection and detoxification application. *Scientific Conference on Chemical Defense Research*, Aberdeen, Maryland.

(70) Madar A, Cohen E, Nyska A, Pollack A (1993). Acarbose effects on cataract development in diabetic sand rat and hypertension in normal rat. *29th Annual Meeting of The European Association for Study of Diabetes*, Istanbul, Turkey.

(71) Nyska A, Fich A, Galiano A (1993). Calcium antagonist induced megacolon in rats. *44th Annual Meeting of the American College of Veterinary Pathologists*, San Antonio, Texas.

(72) Peano S, Nyska A, Bestetti GE, Conz A, Marinelli P, Carbonatto M, Conto A (1994). Spontaneous female genital tract granular cell tumours (GCT) in the Sprague Dawley rat - immunohistochemical comparison with meningeal GCT. *The 1994 Eurotox Meeting*, Basel, Switzerland.

- (73) Stark A, **Nyska A**, Zuckerman A, Madar Z (1994). Changes in intestinal muscular layer following dietary fiber feeding in rats - a morphometric study using image analysis. *Conference on Dietary Fiber: Mechanisms of Action in Human Physiology and Metabolism*, Nantes, France.
- (74) Liberman V, Angel S, Lublin F, Shkolnik T, **Nyska A**, Kashtan H, Owen R, Trostler N, Zajicek G, Rozen P (1994). Human diet induces hyperproliferation in colon of an animal model. *The Annual Meeting of The Israelian Society of Gastroenterology*, Zichron-Yaakov, Israel.
- (75) Wormser U, **Nyska A** (1994). Protective effect of providone-iodine ointment against skin toxicity of mustard gas. *13th International Symposium of Toxicologic Pathologists*, Charleston, South Carolina.
- (76) Weinberger A, **Nyska A**, Giler S (1994). Treatment of experimental inflammatory synovitis with magnetic field. *Annual Meeting of The American College of Rheumatology*, Minneapolis, Minnesota.
- (77) Harmelin A, Zuckerman A, **Nyska A** (1994). Morphometric correlation of Ag-NOR protein with prognosis in canine transmissible venereal tumor (TVT). *45th Annual Meeting of The American College of Veterinary Pathologists*, Montreal, Canada.
- (78) Kaplun A, **Nyska A**, Shainberg A, Shahar A (1994). Implantation of myoblasts cultivated on microcarriers, into the thigh muscles of adult rats. *10th Biennial Meeting of The Society for Developmental Neuroscience*, San-Diego, California.
- (79) Ze'evi A, Uzan R, **Nyska A**, Sintov A (1994). Histological examination of the skin of nude mice treated with oleic acid/oleate containing vehicles. *AAPS 9th Annual Meeting and Exposition*, San Diego, California.
- (80) **Nyska A**, Stark A, Zuckerman A, Madar Z (1995). Intestinal morphometric study in rats fed high fiber diet. *14th International Symposium of The Society of Toxicologic Pathologists*, San Diego, California.
- (81) Weinberger A, **Nyska A**, Giler S (1995). Treatment of inflammatory synovitis with ice application. *59th Annual Meeting of the American College of Rheumatology*, San Francisco, California.
- (82) Shaham-Albalancy A, Rosenberg M, Folman Y, **Nyska A**, Wolfenson D (1996). The effect of progesterone concentration during the luteal phase of the estrous cycle on uterine endometrial morphology and function during subsequent estrous cycle of dairy cows. *13th International Congress on Animal Reproduction*, Sydney, Australia.
- (83) Zusman I, **Nyska A**, Madar Z (1996). Comparative analysis of the role of different pathological methods in early detection of colon cancer in rats. *8th International Symposium of Veterinary Laboratory Diagnosticians*, Jerusalem, Israel.
- (84) **Nyska A**, Hildebrandt P, Herbert R, Hailey RJ (1996). Acute mesenteric periarteritis in F344 rats treated with theophylline. *47th Annual Meeting of The American College of Veterinary Pathologists*, Seattle, Washington.
- (85) Nyska M, **Nyska A** (1996). The use of morphometric image analysis for the study of epiphyseal and subepiphyseal bone growth in rat model. *8th International Symposium of Veterinary Laboratory Diagnosticians*, Jerusalem, Israel.
- (86) Shinar D, Finaly R, **Nyska A**, Mares AJ (1996). Use of collagen coated vicryl mesh (CCVM) in reconstruction of the canine cervical esophagus. *63rd Annual International Congress of The British Association of Pediatric Surgeons*, Jersey, England.

- (87) Zusman I, Madar Z, **Nyska A**, Gurevich P, Koro D (1996). Role of dietary factors in prevention of chemically induced cancers in rats. *International Conference on Experimental and Clinical Oncology*, Athens, Greece.
- (88) Wormser U, Brodsky B, Shatz I, Furth M, Ashash E, Weisman Y, **Nyska A** (1997). A bioassay for evaluation of exposure to environmental hazardous agents. *2nd Chemical and Biological Medical Treatment Symposium*, Spiez, Switzerland.
- (89) Wormser U, Yellin-Arad R, Green BS, Brodsky B, **Nyska A** (1997). Post-exposure treatment with povidone-iodine ointment protects guinea pig skin against sulfur and nitrogen mustards. *2nd Chemical and Biological Medical Treatment Symposium*, Spiez, Switzerland.
- (90) Wormser U, Brodsky B, Moor EV, Eldad A, Gal R, **Nyska A**, Kohen R (1997). Skin surface proteolytic activity: partial characterization and identification. *7th International Aspartic Proteinase Conference*, Banff, British Columbia, Canada.
- (91) Wormser U, Brodsky B, Shatz I, Furth M, Ashash E, Weisman Y, **Nyska A** (1997). A bioassay for evaluation of exposure to environmental hazardous agents. *2nd Chemical and Biological Medical Treatment Symposium*, Spiez, Switzerland.
- (92) Fich A, Eliakim R, **Nyska A** (1997). Effect of nicotine on two models of experimental colitis. *97th Annual Meeting of The American Gastroenterological Association*, Washington DC.
- (93) Lomnitski L, **Nyska A**, Chen Y, Shohami E, Michaelson DM (1998). Apolipoprotein E-deficient mice are more susceptible to closed head injury: a comparative histopathological evaluation of apoE-deficient and control mice. *17th International Symposium of The Society of Toxicologic Pathologists*, Vancouver, Washington.
- (94) Lomnitski L, **Nyska A**, Hochman A, Chapman S, Shohami E, Shoam S, Kohen R, Michaelson DM (1998). ApoE-deficient mice are oxidatively stressed and their antioxidants/oxidants response to closed head injury is deranged. *6th International Conference on Alzheimer's Disease and Related Disorders*, Amsterdam, Holland.
- (95) Wormser U, Kohen R, Moor EV, Eldad A, Gal R, **Nyska A**, Brodsky B (1998). Noninvasive determination of skin surface aspartic proteinase activity in the living animal: implications to human skin. *13th International Congress of Pharmacology*, Munchen, Germany.
- (96) Wormser U, Brodsky B, Green BS, Arad-Yellin R, **Nyska A** (1998). Post-exposure treatment with povidone-iodine protects the skin against chemical and thermal stimuli. *13th International Congress of Pharmacology*, Munchen, Germany.
- (97) Lomnitski L, **Nyska A**, Shohami E, Chen Y, Michaelson DM (1998). Elevated levels of cellular iron in apoE-deficient mouse brain following closed head injury. *7th Annual Meeting of The Israel Society for Neurosciences*, Eilat, Israel.
- (98) Chanas B, Ward S, Healy R, **Nyska A**, Ghanayem BI (1999). Effect of gender on the hematotoxicity of butoxyethanol (BE) in F344 rats. *38th Society of Toxicology Meeting*, New Orleans, Louisiana.
- (99) **Nyska A**, Ghanayem BI, Long PH (1999). BE-induced hemolytic anemia, thrombosis, and infarction in female rats: a possible model for sickle cell anemia-associated thrombosis and infarction. *18th International Symposium of the Society of Toxicologic Pathology*, Washington DC.
- (100) Lomnitski L, **Nyska A**, Maronpot RR, Ben-Shaul V, Bergman M, Grossman S (1999). The potential prophylactic anti-septicemic effects of the new natural antioxidant and of apocynin:

morphological characteristics in a rat LPS model. *18th International Symposium of the Society of Toxicologic Pathology*, Washington DC.

(101) Wormser U, **Nyska A**, Brodsky B (1999). Iodine protects skin against chemical and thermal burns. *European Society of Toxicology Meeting*, Oslo, Norway.

(102) Kritzler JS, Brodsky B, Shatz I, Furth M, Ashash E, Weisman Y, **Nyska A**, Wormser U (2000). A new approach for evaluation of exposure to environmentally hazardous agents. *30th Annual Meeting of the American Society of Toxicology*, Philadelphia, Pennsylvania.

(103) Brodsky B, **Nyska A**, Kohen R, Moor EV, Eldad A, Gal R, Wormser U (2000). Noninvasive determination of skin surface aspartic proteinase activity in the living animal – effect of nitrogen mustard. *30th Annual Meeting of the American Society of Toxicology*, Philadelphia, Pennsylvania.

(104) Wormser U, Brodsky B, Sintov A, **Nyska A** (2000). Post-exposure treatment with iodine protects against sulfur mustard-induced skin lesions. *American Society of Toxicology Meeting*, Philadelphia, Pennsylvania.

(105) Grossman S, Lomnitski L, Breitbart B, Bergman, M, Ben-Shaul V, **Nyska A** (2000). The potential physiological role of NAO, a unique water-soluble natural antioxidant from spinach. *An International Conference on the Efficacy and Safety of Medicinal Herbs*, Chapel Hill, North Carolina.

(106) Wormser U, Brodsky B, Sintov A, **Nyska A** (2000). Topical treatment with iodine protects against sulfur mustard-induced skin irritation. *International Symposium and Course on Burns and Fire Disaster Management*, Jerusalem, Israel.

(107) Suwa T, **Nyska A**, Peckham JC, Hailey R, Mahler J, Maronpot RR (2000). Incidence of histopathological lesions in the prostate and seminal vesicles of control Fischer-344 rats from 2-year carcinogenicity and toxicity studies of the National Toxicology Program. *19th Annual Symposium of the Society of Toxicologic Pathology*, Washington DC.

(108) **Nyska A**, Hester S, House D, Cooper HL, Wolf DC (2000). Effects of caging density on pituitary and testicle related responses. *19th Annual Symposium of the Society of Toxicologic Pathology*, Washington DC.

(109) Moyer C, Kodavanti U, Maronpot R, Costa D, **Nyska A** (2001). Systemic vascular disease in male B6C3F1 mice exposed by inhalation of particulate matter in studies conducted by the National Toxicology Program. *20th Annual Symposium of the Society of Toxicologic Pathology*, Orlando, Florida.

(110) **Nyska A**, Boorman G, Lomnitski L, Spalding J, Dunson D, Grossman S, Ben-Shaul V, Bergman M (2001). Effects of topical and oral administration of natural water-soluble antioxidant, NAO, in skin Tg.AC mouse model using 12-O-tetradecanoylphorbol-13-acetate (TPA) as tumor promoter. *20th Annual Symposium of the Society of Toxicologic Pathology*, Orlando, Florida.

(111) Suwa T, **Nyska A**, Mahler J, Hailey J, Haseman J, Maronpot R (2001). The association between prostatic inflammation of dorsolateral lobe and pituitary gland tumors in control Fischer-344 rats from 2-year carcinogenicity studies of the National Toxicology Program. *20th Annual Symposium of the Society of Toxicologic Pathology*, Orlando, Florida.

(112) Ozaki K, Mahler J, **Nyska A** (2001). Unique renal tubular changes induced in rats and mice by the peroxisome proliferators 2,4-dichlorophenoxyacetic acid and WY-14643. *20th Annual Symposium of the Society of Toxicologic Pathology*, Orlando Florida.

(113) Gottschling B, Hailey J, Maronpot R, Kalunig J, Moomaw C, **Nyska A** (2001). Indium phosphide-related lesions in rat lungs show immunohistochemical evidence of oxidative stress. *20th Annual Symposium of the Society of Toxicologic Pathology*, Orlando, Florida.

(114) **Nyska A**, Lomnitski L, Spalding J, Dunson DB, Grossman S, Ben-Shaul V, Bergman M, Boorman GA (2001). Effects of topical and oral administration of natural water-soluble antioxidant, NAO, in skin Tg.AC mouse model using 12-O-tetradecanoylphorbol-13-acetate (TPA) as tumor promoter. *40th Annual Meeting of the Society of Toxicology*, San Francisco, California.

(115) Suwa T, **Nyska A**, Hailey JR, Mahler JF, Haseman JK, Maronpot RR (2001). The association between inflammation of dosolateral lobe and pituitary gland tumors in control F344 rats from 2-year carcinogenicity and toxicity studies of the National Toxicology Program. *40th Annual Meeting of the Society of Toxicology*, San Francisco, California.

(116) Ozaki K, Mahler JF, **Nyska A** (2001). Unique renal tubular changes induced in rats and mice by the peroxisome proliferators 2,4-dichlorophenoxyacetic acid and WY-14643. *40th Annual Meeting of the Society of Toxicology*, San Francisco, California.

(117) Gottschling BC, Kalunig JE, Moomaw CR, Hailey JR, Maronpot RR, **Nyska A** (2001). Indium-phosphide-related lesions in rat lungs show evidence of oxidative stress. *40th Annual Meeting of the Society of Toxicology*, San Francisco, California.

(118) Ghanayem BI, **Nyska A**, Bucher J (2002). Acrylonitrile is carcinogenic in male B6C3F1 mice. *41st Annual Meeting of the Society of Toxicology*, Nashville, Tennessee.

(119) Moomaw CR, Chan PC, Foley JE, Maronpot RR, Peddada S, Cummings CA, Eldridge S, **Nyska A** (2002). Endothelial-cell kinetics in rat model of riddelliine-induced hemangiosarcoma. *41st Annual Meeting of the Society of Toxicology*, Nashville, Tennessee.

(120) **Nyska A**, Nold JB, Johnson JD, Abdo K (2002). Lysosomal storage disorder induced by Elmiron in rats and mice. *41st Annual Meeting of the Society of Toxicology*, Nashville, Tennessee.

(121) Suttie A, **Nyska A**, Goldsworthy T, Moser M, Hackett T, Maronpot R (2002). Classification and quantitation of proliferative lesions in mouse prostate. *21st Annual Symposium of the Society of Toxicologic Pathology*, Denver, Colorado.

(122) Moyer C, Basabe A, Allen D, Maronpot R, **Nyska A** (2002). Riddelliine exposure induces activated VEGFR-2 expression in rat liver endothelium: a possible mechanism for hemangiosarcoma formation. *21st Annual Symposium of the Society of Toxicologic Pathology*, Denver, Colorado.

(123) Allen D, Moyer C, Basabe A, Maronpot R, **Nyska A** (2002). Riddelliine exposure induces alterations in VEGF expression in rat liver: a possible mechanism for hemangiosarcoma formation. *21st Annual Symposium of the Society of Toxicologic Pathology*, Denver, Colorado.

(124) **Nyska A**, Moomaw C, Foley J, Malarkey D, Cummings C, Peddada S, Travlos G, Chan P (2002). Use of a rat model to investigate possible mechanisms of hepatic hemangiosarcoma induction by the pyrrolizidine alkaloid riddelliine. *21st Annual Symposium of the Society of Toxicologic Pathology*, Denver, Colorado.

(125) **Nyska A**, Suttie A, Lomnitski L, Bakashi S, Bergman M, Ben Shaul V, Grossman S, Grockett P, Haseman J, Moser G, Goldsworthy T, Maronpot B (2002). Slowing tumorigenic progression in TRAMP mice and prostatic carcinoma cell lines using spinach NAO – A comparative study of three antioxidants. *21st Annual Symposium of the Society of Toxicologic Pathology*, Denver, Colorado.

(126) Wormser U, Brodsky B, **Nyska A** (2002). Novel peptides protect against sulfur mustard-induced skin toxicity. *41st Annual Meeting of the Society of Toxicology*, Nashville, Tennessee.

(127) Germolec D, **Nyska A**, Kuper F, Luster M, Portier C, Kashon M, Helms R, Kommineni V, Holsapple M, Johnson K, Maronpot R (2003). Improving the sensitivity and predictability of current testing strategies for immunotoxicity. *European Society of Toxicology*, Florence, Italy.

(128) Jokinen MP, NJ, Walker NJ, Brix AE, Sells DM, **Nyska A** (2003). Exacerbation of cardiovascular pathologies in female Sprague Dawley rats following treatment with 3,3',4,4',5-pentachlorobiphenyl (PCB126) or 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *42nd Annual Meeting of the Society of Toxicology*, Salt Lake City, Utha

(129) Brix AE, Jokinen MP, Walker NJ, Sells DM, **Nyska A** (2003). Characterization of bronchiolar metaplasia in Rats Exposed to 3,3',4,4',5-Pentachlorobiphenyl (PCB 126). *42nd Annual Meeting of the Society of Toxicology*, Salt Lake City, Utha.

(130) **Nyska A**, Shabat S, Long PH, Ezov N, Levin-Harus T, Peddada S, Redlich M, Yedgar S, Nyska M (2003). Bone damage in chemically induced rat model of human haemolytic disorders associated with thrombosis – comparative pathological and MRI investigation. *42nd Annual Meeting of the Society of Toxicology*, Salt Lake City, Utha.

(131) Lomnitski L, Padilla-Banks E, Jefferson WN, **Nyska A**, Grossman S, Newbold RR (2003). Lack of estrogenic or anti-estrogenic activity of the antioxidant (NAO) found in spinach. *42nd Annual Meeting of the Society of Toxicology*, Salt Lake City, Utha.

(132) Langenbach RR, **Nyska A**, Brodsky B, Wormser (2003). Effects of sulfur mustard on skin toxicity in COX-1 and COX-2-deficient mice. *42nd Annual Meeting of the Society of Toxicology*, Salt Lake City, Utha

(133) Wormser U, Brodsky B, Sintov A, Casillas RP, **Nyska** (2003). Protective effects of topical iodine containing anti-inflammatory drugs against sulfur mustard. *42nd Annual Meeting of the Society of Toxicology*, Salt Lake City, Utha

(134) Moomaw CR, Foley JF, **Nyska A** (2003). Enhanced expression of vascular coagulation adhesion molecule (VCAM-1) in 2-buthoxyethanol-induced hemolysis and thrombosis in female rats. *42nd Annual Meeting of the Society of Toxicology*, Salt Lake City, Utha

(135) Kodavanti UP, Moyer CF, Ledbetter AD, Schladweiler MC, Gilmour PS, Hauser R, Christiani DC, Costa DL, **Nyska A** (2003). Myocardial injury from inhaled combustion particles: Is there a role for zinc? *99th International Conference, American Thoracic Society*, , Seattle, Washington

(136) Gallardo-Williams MT, **Nyska A** Suttie A, Maronpot RR (2003). Mouse models and chemoprevention of prostate cancer. *International Conference of the American Society of Cancer Research*, Orlando, Florida.

(137) Tam NNC, Maronpot RR, Lomnitski L, **Nyska A**, Crocket P, Haseman JK, Grossman S, Ho SM (2003). Immunohistochemical assessment of antioxidant efficacy in TRAMP model – a comparative study of three anti-oxidants. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(138) **Nyska A**, Moomaw CR, Foley JF, (2003). Enhanced expression of vascular coagulation adhesion molecule (VCAM-1) in 2-buthoxyethanol-induced hemolysis and thrombosis in female rats. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(139) Lomnitski L, Padilla-Banks E, Jefferson WN, **Nyska A**, Grossman S, Newbold RR (2003). Lack of estrogenic or anti-estrogenic activity of the antioxidant (NAO) found in spinach. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(140) **Nyska A**, Shabat S, Long PH, Ezov N, Levin-Harus T, Peddada S, Redlich M, Yedgar S, Nyska M (2003). Bone damage in chemically induced rat model of human haemolytic disorders associated with thrombosis – comparative pathological and MRI investigation. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(141) Brix AE, Jokinen MP, Walker NJ, Sells DM, **Nyska A** (2003). Characterization of bronchiolar metaplasia in Rats Exposed to 3,3',4,4',5-Pentachlorobiphenyl (PCB 126). *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(142) Jokinen MP, NJ, Walker NJ, Brix AE, Sells DM, **Nyska A** (2003). Exacerbation of cardiovascular pathologies in female Sprague Dawley rats following treatment with 3,3',4,4',5-pentachlorobiphenyl (PCB126) or 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(143) Hill GD, Pace V, Persohn E, Bresser C, Haseman JK, Tischler AS, **Nyska A** (2003). A comparative immunohistochemical study of spontaneous and chemically induced pheochromocytomas in B6C3F1 mice. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(144) Tani Y, Maronpot RR, Foley JF, Haseman JK, **Nyska A** (2003). Follicular Epithelial Cell Hypertrophy Induced by Chronic Oral Administration with 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) in Female Harlan Sprague-Dawley Rats. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(145) Moyer CF, Dunnick J, **Nyska A** (2003). Cardiac troponin T immunohistochemistry: an aid in the diagnosis of myocardial damage – preliminary findings after bis(2-chloroethoxy)methane exposure in rats. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(146) Suttie A, **Nyska A**, Maronpot RR (2003). Neuroendocrine and other non-epithelial tumors in the TRAMP mouse: metastasis and effect of dietary restriction. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(147) Suttie A, **Nyska A**, Tani YJ, Foley JF, Maronpot RR (2003). Linkage between morphology and SV40 staining of proliferative prostatic lesions in the TRAMP mouse. *22nd Annual Symposium of the Society of Toxicologic Pathology*, Savannah, Georgia.

(148) Kodavanti UP, CF Moyer CF, Ledbetter AD, Schladweiler MC, Gilmour PS, McGee J, R Hauser R, Christiai DC, Cosa DL, **Nyska A** (2003). Myocardial injury from inhaled combustion particles: is there a role for zinc? *99th International Conference of the American Thoracic Toxicology*, Seattle, Washington.

(149) Jokinen MP, NJ, Walker NJ, Brix AE, Sells DM, **Nyska A** (2004). Cardiovascular changes following chronic rodent exposure to dioxin-like compounds. *43rd Annual Meeting of the Society of Toxicology*, Baltimore, Maryland.

(150) Walker NJ, **Nyska A**, Alden C, Brix AE, Hailey JR, Haseman JK, Jokinen MP, Orzech DP, Smith CS, Wyde ME, Bucher JR (2004). Chronic toxicity of dioxin-like compounds in female Harlan Sprague-Dawley rats. *43rd Annual Meeting of the Society of Toxicology*, Baltimore, Maryland

(151) Smith MV, **Nyska A**, Portier C (2004). Application of a statistical dynamic model investigating the short-term cellular kinetics induced by riddelliine, a hepatic endothelial carcinogen. *43rd Annual Meeting of the Society of Toxicology*, Baltimore, Maryland.

(152) Nyska A, Sintov A, Langenbach R, Brodsky B, Wormser U (2004). Reduced sulphur mustard-induced skin toxicity in COX-2 knockout and celecoxib-treated mice. *43rd Annual Meeting of the Society of Toxicology*, Baltimore, Maryland.

(153) Germolec DG, Nyska A, Kuper CF, Luster M, Portie C, Kashon M, Kommineni C, Johnson K, Luster M (2004). The Sensitivity and predictability of current testing strategies to evaluate immunotoxicity. *International Meeting of the International Federations of the Societies of Toxicologic Pathologists*, Kobe, Japan.

(154) Couse JF, Yates MM, Nyska A, Sanford R, Nilson JH, Korach KS (2004). Ovaries lacking estrogen receptor α or β respond differently to chronically elevated luteinizing hormone. Meeting of the Triangle Consortium of Reproductive Biology, North Carolina.

(155) Nyska A, Murphy T, Foley JF, Collins B, Dunnick JK (2004). Acute hemorrhagic micro-infarction in hearts of rats exposed to ephedrine and caffeine in combination. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(156) Behar V, Nadler J, Vainshtein A, Grunfeld Y, Ezov N, Gileadi O, Cummings CA, Nyska A (2004). Scanning electron microscopy (SEM) under fully hydrated conditions: validation in model of hyaline-droplet nephropathy. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(157) Nyska A, Jokinen MP, Brix AE, Sells MD, Wyde ME, Orzec D, Haseman JK, Flake G, Walker NJ. (2004). Exocrine pancreatic pathology in female Sprague-Dawley rats following chronic treatment with 2,3,7,8-tetrachlorodibenzo-*p*-dioxin and dioxin-like compounds. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(158) Johnson JA, Dunnick J, Horton J, Nyska A (2004). Short-term cardiotoxic damage induced by bis(2chloroethoxy)methane in the F344 rat revealed light and electron microscopically. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(159) Tani Y, Suttie A, Flake G, Nyska A, Maronpot R (2004). Epithelial-stromal tumor of the transgenic adenocarcinoma mouse prostate model (TRAMP) mouse seminal vesicle. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(160) Tani Y, Foster PM, Sills RC, Maronpot RR, Nyska A (2004). Epididymal sperm granuloma induced by chronic administration of 2-methylimidazole in B6C3F₁ mice. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(161) Gilmour PS, Nyska A, Schladweiler MC, Ledbetter AD, Kodavanti U (2004). Myocardial and cardiovascular effects following pulmonary exposure to zinc. *43rd Annual Meeting of the Society of Toxicology*, Baltimore, Maryland.

(162) Rhodes MC, Seidler FJ, Abdel-Rahman A, Tate CA, Nyska A, Rincavage HK, Slotkin TA (2004). Terbutaline is a developmental neurotoxicant: effects on neuroproteins and morphology in cerebellum, hippocampus, and somatosensory cortex. *43rd Annual Meeting of the Society of Toxicology*, Baltimore, Maryland.

(163) Nyska A, Sintov A, Langenbach R, Brodsky B, Wormser U (2004). Reduced sulphur mustard-induced skin toxicity in COX-2 knockout and celecoxib-treated mice. *43rd Annual Meeting of the Society of Toxicology*, Baltimore, Maryland.

(164) Tani Y, Bishop JB, Witt K, Johnson J, Paddada S, Dunnick J, Nyska A (2004). Mitochondrial damage revealed by morphometric and semiquantitative analysis of mouse pup cardiomyocytes

following in utero and postnatal exposure to zidovudine and lamivudine. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(165) **Nyska A**, Blaugrund E, Mayk A, Raymond E, Tani Y, Russek N, Horowitz M, Behar V (2004). Morphometric quantification of myelin loss by scanning electron microscopy (SEM) under fully hydrated conditions: validation in a mouse model of experimental autoimmune encephalomyelitis. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(166) Brix EA, **Nyska A**, Haseman JK, Sells DM, Jokinen MP, Walker NJ (2004). Incidences of selected lesions in control Harlan Sprague-Dawley rats from two-year toxic equivalency studies performed by the National Toxicology Program. *23rd Annual Symposium of the Society of Toxicologic Pathology*, Salt Lake City, Utah.

(167) Walker NJ, **Nyska A**, Crockett P, Brix A, Jokinen MP, Hailey JR, Haseman JK, Wyde ME, Alden C, Smith C, Orzech D, Bucher JR (2005). Carcinogenicity of dioxin-like compounds in female Harlan Sprague-Dawley rats. *Dioxin Symposium*, Munchen, Germany.

(168) Geffen Y, **Nyska A**, Kipnis Y, Ziv Y, Smirnov I, Shpilman S, Vertkin I, Kimron L, Hecht T, Reymann K, M, Schwartz M, Yoles E (2004). Immune modulation: a novel treatment for ischemic stroke. *Society for Neuroscience (SFN) 34th Annual Meeting*, San Diego CA.

(169) Bonner J, Walters D, Rice A, Manning B, Kleeberger S, Tani Y, **Nyska A**, Ingram J (2004). Susceptibility of STAT-1 deficient mice to pulmonary fibrogenesis. *13th International Fibrosis Colloquium*, Banff, Alberta, Canada.

(170) Kodavanti PK, Schladweiler MC, Gilmour PS, McGee J, Watkinson WP, Jaskot R, Richards J, Ledbetter A, Costa DL, Graff D, Cascio W, **Nyska A** (2004). Paradoxical role of zinc in cardiac injury: a potential link to environmental zinc exposure and cardiovascular morbidity. *American Heart Association Meeting*, New Orleans, LA.

(171) Hanlon P, Petranka J, Howden R, Dunnick J, **Nyska A**, Murphy E (2005). Ephedrine and caffeine cause significant mortality in 14-week, but not in 7-week-old Fischer rats. *43rd Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(172) Ortel TL, Potti A, Hoke H, Ward SM, Peddada S, Wu J, **Nyska A** (2004). A novel chemically induced murine Fischer F334 model for thrombotic sequelae of hemolytic anemias. *Annual meeting of The American Society of Hematology*, San Diego, CA.

(173) Walker NJ, Wyde M, **Nyska A**, Crockett P, Bucher J, Portier C (2005). Testing the toxic equivalency factor (TEF) hypothesis: the NTP dioxin/PCB cancer bioassays. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(174) Yoshizawa K, Walker NJ, Jokinen MP, Brix AE, Sells DM, Tiwanda M, Wyde ME, Orzech D, Haseman JK, **Nyska A** (2005). Gingival carcinogenicity in female Harlan Sprague-Dawley rats after oral treatment for two years with TCDD and dioxin-like compounds. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(175) Behar V, Blaugrund E, Mayk A, Raymond E, Tani Y, Russek N, Horowitz M, **Nyska A** (2005). Morphometric quantification of myelin loss by scanning electron microscopy (SEM) under fully hydrated conditions: validation in a mouse model of experimental autoimmune encephalomyelitis. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(176) **Nyska A**, Murphy T, Foley JF, Collins B, Dunnick JK (2004). Acute Hemorrhagic Micro-Infarction in Hearts of Rats Exposed to Ephedrine and Caffeine in Combination. *44th Annual Meeting of the Society of Toxicology*, New Orleans, USA.

(177) Lewis DL, Nyska M, Johnson K, Malarkey D, Ward D, Streicker M, Shabat S, Peddada S, **Nyska A** (2005). 2-Butoxyethanol female rat model of hemolysis and disseminated thrombosis: X-ray characterization of osteonecrosis and growth plate suppression. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(178) Wormser U, Brodsky B, Proscura E, Foley JF, Jones T, **Nyska A** (2005). Topical iodine suppresses sulfur-mustard-induced tumor necrosis factor alpha in mouse ear model. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA

(179) Trivedi S, Wormser U, Flagler N, Foley JF, Brodsky B, **Nyska A** (2005). Short-term epidermal cell kinetics study following topical iodine treatment in sulfur mustard model of skin damage in the guinea pig. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(180) Marsh T, Foley JF, **Nyska A**, Jokinen MP, Brix AE, Sells DM, Wyde ME, Orzech D, Paddada S, Walker NJ, Yoshizawa K (2005). Immunohistochemical analysis of exocrine pancreatic toxicity induced by TCDD in female Harlan SD rats. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(181) Fomby LM, Hejtmancik M, Vasconcelos D, Vallant M, Orzech D, Chhabra R, Walker N, **Nyska A**, Hooth MJ (2005). Comparative subchronic toxicity studies of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in female Harlan Sprague-Dawley (HSD) and Fischer 344 (F344) rats. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(182) Hooth MJ, Hejtmancik M, Vasconcelos D, Vallant M, Orzech D, Chhabra R, Walker N, **Nyska A**, Fomby LM (2005). 13-week comparative study of 1,2,3,4,6,7-hexachloronaphthalene (PCN 66) and 1,2,3,5,6,7-hexachloronaphthalene (PCN 67) in female Harlan Sprague-Dawley and Fischer 344 rats. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(183) White KL Jr, **Nyska A**, Brown RD, Musgrove DL, Guo TL, Germolec DR (2005). Immune functional and histopathological alterations following exposure in female B6C3FI mice to the widely used vehicle Elmiron®. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(184) Kodavanti UP, Schladweiler MC, Ledbetter AD, McGee J, Gilmour PS, Watkinson WP, Christiani DC, Costa DL, Jaskot RH, Richards JH, **Nyska A** (2005). Cardiac injury from long-term episodic exposure to particulate matter (PM): soluble components or solid particles? *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(185) Dunnick J, Parker J, Blackshear P, **Nyska A** (2005). Recovery from heart toxicity in the rat after bis(2-chloroethoxy)methane treatment. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.

(186) Schladweiler MC, Ledbetter AD, **Nyska A**, Gilmour PS, Christiani DC, Richards JH, Jaskot RH, Watkinson WP, Costa DL, McGee JK, Kodavanti UP (2005). Pulmonary injury and inflammation from repeated exposure to soluble components and solid particulate matter (PM). *100th Meeting of the American Thoracic Society*, San Diego, CA.

(187) Kodavanti UP, Schladweiler MC, Ledbetter AD, McGee J, Gilmour PS, Watkinson WP, Christiani DC, Costa DL, Jaskot RH, Richards JH, **Nyska A** (2005). Cardiovascular injury from acute and repeated exposure to particulate matter (PM): Potential role of zinc. *100th Meeting of the American Thoracic Society*, San Diego, CA.

(188) Yoshizawa K, Walker NJ, Jokinen MP, Brix ME, Sells DM, Marsh T, Wyde ME, Orzech Haseman JK, **Nyska A** (2005) Gingival carcinogenicity in female Harlan Sprague-Dawley rats following two-year oral treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin and dioxin-like compounds. *24th Annual Symposium of the Society of Toxicologic Pathology*, Washington, DC.

- (189) Yoshizawa K, Marsh T, Foley JF, Cai B, Peddada S, Walker NJ, **Nyska A** (2005). Mechanisms of exocrine pancreatic toxicity induced by oral treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin in female Harlan Sprague-Dawley rats. *24th Annual Symposium of the Society of Toxicologic Pathology*, Washington, DC.
- (190) Yoshizawa K, Kissling GE, Johnson J, **Nyska A** (2005). Chemical-induced atrial thrombosis in the rodent NTP studies: morphological aspects and potential mechanisms. *24th Annual Symposium of the Society of Toxicologic Pathology*, Washington, DC.
- (191) Yoshizawa K, Oishi Y, Matsumoto M, **Nyska A** (2005). Ischemic brain damage after ketamine and xylazine treatment in a young laboratory monkey (*Macaca fascicularis*). *24th Annual Symposium of the Society of Toxicologic Pathology*, Washington, DC.
- (192) Elmore S, **Nyska A**, Zheng C, Baum B, Irwin R (2005). The Transduction Of Rat Submandibular Glands By An Adenoviral Vector Carrying The Human Growth Hormone Gene Is Associated with Limited and Reversible Changes at the Injection Site. *24th Annual Symposium of the Society of Toxicologic Pathology*, Washington, DC.
- (193) Dunnick J, Parker J, Blackshear P, Johnson J, **Nyska A** (2005). Studies to identify gene changes in the heart during recovery from heart toxicity induced by bis(2-chloroethoxy)methane. *24th Annual Symposium of the Society of Toxicologic Pathology*, Washington, DC.
- (194) Ortel TL, Potti A, Wu J, **Nyska A** (2005). Adhesion-molecule changes in 2-butoxyethanol (BE) Fischer F334 model for thrombotic sequelae of hemolytic anemias. *44th Annual Meeting of the Society of Toxicology*, New Orleans, LA.
- (195) Bomstein Y, Vitner K, Bressler K, Yahalom B, Smirnov I, **Nyska A**, Cohen Z, Castel D, Willenz U, Zibli Z, Marder J, Yoles E (2005). Macrophage Therapy for Spinal Cord Injury has No Adverse Impact on Function and Morphology of Spared Nerve Tissue. *23rd Annual Neurotrauma Society Symposium, 9-11 November 2005, Washington D.C.*
- (196) Walker NJ, Wyde ME, Easterling M, **Nyska A**, Bucher JR, Portier CJ (2006). Alteration in carcinogenic potency of PCB126 by PCB153 following chronic exposure in female rats. *45th Annual Meeting of the Society of Toxicology*, Dan Diego, CA.
- (197) Clayton NP, Yoshizawa K, Kissling G, Burka LT, Chan PC, **Nyska A** (2006). 14-week oral toxicity studies of Kava in F344 rats: immunohistochemical analysis of expression of hepatic cytochrome P450. *45th Annual Meeting of the Society of Toxicology*, Dan Diego, CA
- (198) Ramot Y, Lewis DA, ; Ortel TL, Streicker M, Glenda M; Elmore S, ; Ward S, Peddada S, **Nyska A** (2006). Age and dose-related sensitivity in 2-butoxyethanol F344 rat model of hemolytic anemia and disseminated thrombosis. *45th Annual Meeting of the Society of Toxicology*, Dan Diego, CA
- (199) Wallenborn JC, Schladweiler MCJ, Ledbetter AD, **Nyska A**, Johnson JA, Thomas R, Jaskot R, Richards JH, Kodavanti UP (2006). Comparison of cardiopulmonary responses of Wistar Kyoto (WKY) and stroke prone spontaneously hypertensive rats (SHRSP) to particulate matter (PM) exposure. *45th Annual Meeting of the Society of Toxicology*, Dan Diego, CA
- (200) Wyde M, Hejtmancik M, Johnson J, **Nyska A**, Vallant M, Easterling M, Bucher J, Walker N (2006). Relative carcinogenic potency of PCB 126 and PeCDF in dermally exposed female Tg.AC mice. *45th Annual Meeting of the Society of Toxicology*, Dan Diego, CA
- (201) Johnson K, VanderKlok C, Rouse D, Myers P, **Nyska A**, Johnson J, Horton J, Maronpot R, Lieuallen W, Malarkey D, Dunnick J (2006). Ultrasonic Analysis, In Vivo Analysis of Cardiotoxicity in B6C3F1 Mice. *45th Annual Meeting of the Society of Toxicology*, Dan Diego, CA.

(202) Golomb E, Schneider, Houminer, Dunnick J, Kissling G, Borman, **Nyska A**, Schwalb H (2006). Bis(2-chloroethoxy)Methane Impairs Cardiac Mitochondrial Response to Ischemic Injury; Ex Vivo Assessment of the Functional Mitochondrial Effect of a Cardiotoxic Agent. *25th Annual Meeting of the Society of Toxicologic Pathology*, Vancouver, Canada.

(203) Ramot Y, Lewis DA, Ortel TL, Streicker M, Glenda M; Elmore S, ; Ward S, Peddada S, **Nyska A** (2006). Age and dose-related sensitivity in 2-butthoxyethanol F344 rat model of hemolytic anemia and disseminated thrombosis. *25th Annual Meeting of the Society of Toxicologic Pathology*, Vancouver, Canada.

(204) Kodavanti U, **Nyska A**, Ledbetter A, Schladweiler M, Gottipolu R, Wallenborn G, Thomas R, Jaskot R, Richards R, Crissman K, Hatch G, Kissling G², Maronpot R (2006). Cardiovascular diseases, susceptibility to oxidative injury and compensatory mechanisms: Insights from rodent models. *25th Annual Meeting of the Society of Toxicologic Pathology*, Vancouver, Canada.

(205) Golomb E, **Nyska A.**, Schwalb H (2006). Bis(2-chloroethoxy)Methane Impairs Cardiac Mitochondrial Response to Ischemic Injury; Ex Vivo Assessment of the Functional Mitochondrial Effect of a Cardiotoxic Agent. *25th Annual Meeting of the Society of Toxicologic Pathology*, Vancouver, Canada.

(206) Clayton NP, Yoshizawa K, Kissling G, Burka LT, Chan PC, **Nyska A** (2006). 14-week oral toxicity studies of Kava in F344 rats: immunohistochemical analysis of expressions of hepatic cytochrome P450. *25th Annual Meeting of the Society of Toxicologic Pathology*, Vancouver, Canada.

(207) Sells DM, Brix AE, **Nyska A**, MP Jokinen MP, Orzech DP, Walker NJ (1006). Respiratory tract lesions in non-inhalation studies. *Annual Meeting of the Society of Toxicologic Pathology*, Vancouver, Canada.

(208) Yoshizawa K, Walker NJ, Jokinen MP, Brix AE, Sells DM, **Nyska A**, Wyde ME (2006). Thyroid Follicular Lesions Induced by Oral Treatment for Two Years with 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin and Dioxin-like Compounds in Female Harlan Sprague-Dawley Rats.. *Annual Meeting of the Society of Toxicologic Pathology*, Vancouver, Canada.

(209) Gottipolu R, , Schladweiler MC, **Nyska A**, Malarkey D, Wallenborn JG, Ledbetter AD, Winsett D, Richards JH, Krantz T, Gilmour MI, Thomas R, Jaskot RH, Kodavanti UP. (2007). Pulmonary and systemic effects of four week diesel inhalation in healthy and hypertensive rats. *46th Annual Meeting of the Society of Toxicology*, Charlotte, North Carolina.

(210) Schladweiler MC, **Nyska A**, Malarkey D, Ledbetter AD, Wallenborn JG, Gottipolu RR, Richards JH, Thomas R, Jaskot RH, Shannahan J, Crissman K, Hatch GE, Kodavanti UP. (2007). Comparative evaluation of risk factors for cardiovascular disease (CVD) in genetically predisposed rats. *46th Annual Meeting of the Society of Toxicology*, Charlotte, North Carolina.

(211) Wallenborn JG, Schladweiler MC, Ledbetter AD, Krantz T, **Nyska A**, Johnson J, Linak WP, Gottipolu R, Richards JH, Kodavanti UP. (2007). Differential cardiac susceptibility of Wistar Kyoto (WKY) and spontaneously hypertensive rats (SHR) to diesel exhaust particles (DEP) exposure. American Thoracic Society Meeting, San Francisco.

(212) Wyde ME, Bordelon NR, **Nyska A**, Mann J, Hebert CD, Bucher JR (2007). Thirteen week toxicity study of indole-3-carbinol in B6C3F1 mice and Fischer 344 rats. *46th Annual Meeting of the Society of Toxicology*, Charlotte, North Carolina.

- (213) Yoshizawa K, Brix AE, Sells DM, Jokinen MP, Wyde M, Walker NJ, **Nyska A** (2007). Reproductive Lesions in Female Harlan Sprague-Dawley Rats Following Two-year Oral Treatment with Dioxin and Dioxin-like Compounds. Society of Toxicologic Pathologist Meeting, San Juan, USA.
- (214) Yoshizawa K, Walker NJ, Miller RA, Brix AE, Sells DM, Jokinen MP, Wyde ME, **Nyska A** (2007). Pulmonary Lesions in Female Harlan SD Rats Following Two-Year Oral Treatment with Dioxins. Society of Toxicologic Pathologist Meeting, San Juan, USA.
- (215) Wyde ME, Bordelon NR, Mann J, Hill G, Painter JT, Yoshizawa K, Hebert CD, Bucher JD, **Nyska A** (2007). Subchronic administration of indole-3-carbinol in B6C3F1 mice and Fischer 344 rats is associated with increased hepatic CYP 1A1 and 1A2 activities, but without liver toxicity. Society of Toxicologic Pathologist Meeting, San Juan, USA.
- (216) Heatherly A, Yoshizawa K, Malarkey DE, Walker NJ, **Nyska A** (2007). A Critical Comparison of Murine Pathology and Epidemiological Data of Dioxins and PCBs (candidate for student travel award). Society of Toxicologic Pathologist Meeting, San Juan, USA.
- (217) Wallenborn, J. G., Evansky, P., Shannahan, J. H., Schladweiler, M. C., Vallanat, B., Gottipolu, R., Ledbetter, A. D., Richards, J. H., **Nyska, A.**, Kodavanti, U. P. (2008). SUBCHRONIC INHALATION OF ZINC SULFATE CAUSES CARDIAC CHANGES IN HEALTHY RATS. *47th Annual Meeting of the Society of Toxicology*,
- (218) M.C. Schladweiler, A.D. Ledbetter, J. Shannahan, J.G. Wallenborn, **A. Nyska**, D. Malarkey, J. Richards, H. Tong, R.B. Devlin and U.P. Kodavanti (2008). SUBCHRONIC EPISODIC EXPOSURE OF RATS TO DIESEL PLUS OZONE INDUCES MINIMAL CARDIOPULMONARY EFFECTS. *47th Annual Meeting of the Society of Toxicology*,
- (219) Matthew D. Stout; Bradley J. Collins; Ronald A. Herbert; **Abraham Nyska**; Grace E. Kissling; Keith Levine; Glenn T. Ross; Charles D. Hébert; Gregory S. Travlos; John R. Bucher; and Michelle J. Hooth (2008). Toxicity and carcinogenicity of chromium following chronic oral exposure: dependence on valence state and tissue uptake. *47th Annual Meeting of the Society of Toxicology*,
- (220) Singh BP, **Nyska A**, Malarkey D, Dunnick J, (2008). Investigations of effects of Milk thistle in two-years feeding study using F344/N rats and B6C3F1 mice. *47th Annual Meeting of the Society of Toxicology*,
- (221) U.P. Kodavanti, R.F. Thomas, M.C. Schladweiler, A.D. Ledbetter, J. Shannahan, J.G. Wallenborn, **A. Nyska**, J. Richards, R. Jaskot (2008). NOVEL INSIGHTS INTO THE MECHANISM OF SUBCHRONIC AIR POLLUTANT-INDUCED CARDIOVASCULAR IMPAIRMENT. *American Thoracic Society meeting, Toronto, Ontario, Canada*.
- (222) Ramot, Y., **Nyska, A.**, Lieuallen, W., Maly, A., Zlotogorski, A., Flake, G., Kissling G. E., Brix, A., Malarkey, D. E. and Hooth, M. (2008) Inflammatory and chloracne-like skin lesions in B6C3F1 mice exposed to tetrachloroazobenzene (TCAB) for 2 years. Society of Toxicologic Pathologist Meeting, San Francisco, USA
- (223) Singh, B. P., **Nyska, A.**, Johansson, S., Malarkey, D. E., and Hooth, M. J. (2008) Urethral transitional cell carcinoma and hyperplasia in B6C3F1 mice treated with tetrachloroazobenzene (TCAB). Society of Toxicologic Pathologist Meeting, San Francisco, USA.
- (224) Manno R., Ramot Y., Yoshimasa O, Krakovsky M, Lamensdorf I., Meiron M, Toren A., **Nyska A.** (2009). Spontaneous Aortitis in the Balb/c Mouse. Society of Toxicologic Pathologist Meeting, Washington, DC. USA.

(225) Boudonck KJ, Mitchell MW, Shinar D, **Nyska A**, Moti Rosenstock (2009). Discovery of Metabolomics Biomarkers for Early Detection of Nephrotoxicity. Society of Toxicologic Pathologist Meeting, Washington, DC. USA.

(226) Walker NJ, Easterling M, **Nyska A**, Kissling GE, Smith CS, Malarkey D, Hooth MJ (2010). Carcinogenic potency of 2,3',4,4',5-pentachlorobiphenyl (PCB118) in female Harlan Sprague-Dawley rats. *48th Annual Meeting of the Society of Toxicology*,

(227) Padilla-Carlin DJ, Schladweiler MCJ, Kodavanti UP, Shannahan JH, Richards JH, **Nyska A**, Bern A, Lowers H, Meeker G, Gavett SH (2010). Cellular and inflammatory responses in bronchoalveolar lavage and lungs in rats after intratracheal instillation of Libby amphibole or amosite asbestos. *48th Annual Meeting of the Society of Toxicology*.

(228) Kodavanti, UP, Thomas R, Lund A, Schladweiler, MC, Campen MJ, Shannahan JH, Ledbetter AD, Richards JE, **Nyska A**, Jaskot RH, Butler EO, Parinandi NJ, (2010). Oxidized lipids and lipid mediators are involved in the cardiovascular injury induced by diesel exhaust particles (DEP) and oxone. *48th Annual Meeting of the Society of Toxicology*.

(229) Cyphert JM, Padilla-Carlin DJ, Schladweiler MC, **Nyska A**, Shannahan JH, Kodavanti UP, and Gavett SH. (2011). Long term response of rats to single intratracheal exposure of Libby Amphibole (LA) or Amosite. *49th Annual Meeting of the Society of Toxicology*.

(230) Behl M, **Nyska A**, Hejtmancik M and Chan PC (2011). Liver toxicity following Kava Kava administration in F344 Rats and B6C3F1 Mice. *49th Annual Meeting of the Society of Toxicology*.

(231) Shannahan JH, **Nyska A**, Cesta MF, Vallant BD, Schladweiler MCJ, Gavett SH⁵ Kodavanti UP (2011) Early onset of unique proliferative lesions in the lungs of a Libby Amphibole exposed rat model of cardiovascular disease-associated iron overload. American Thoracic Society Meeting,

(232) Cyphert JM, Padilla-Carlin DJ, **Nyska A**, Shannahan JH, Schladweiler MC, Kodavanti UP, and Gavett SH. (2012). Acute Toxicological Responses of Fischer Rats to Naturally Occurring Asbestos from the United States and Canada 51th Annual Meeting of the Society of Toxicology.

(233) Poster: Detecting and quantifying liver pathologies using compact, high-resolution 3D MRI-based Histology. Yael S Schiffenbauer, Catherine Tempel-Brami, Rinat Abramovitch, Tali Lanton, Jonathan H. Axelrod, Eithan Galun, **Abraham Nyska** and Robert Maronpot. EUROPEAN SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, GHENT, BELGIUM

(234) POSTER: Significant lessening of local reactions following continuous subcutaneous administration of ND0701, a new apomorphine formulation for Parkinson's Disease – MRI and histopathology studies. Ronit Shaltiel-Karyo, Hanita Ovadia, Yonit Tzarfati, Oron Yacoby-Zeevi, Yael Schiffenbauer and **Abraham Nyska**. EUROPEAN SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, 2014, BERLIN, GERMANY

(234) LECTURE: The Utility of Compact MRI for Assessment of Phenotypes and Therapeutic Efficacy, Yael Schiffenbauer, **Abraham Nyska**, EUROPEAN SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, 2015, Surrey, UK

(235) POSTER: Ex-vivo Compact Magnetic Resonance Imaging (MRI) of the Brain with Histopathology Validation in a Rat Model of Huntington Disease. Yael Schiffenbauer, Enrico Vezzali, Edgar Weber, Rebekka Pietrek, Michel Steiner, **Abraham Nyska**. EUROPEAN SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, 2015, Surrey, UK

(236) POSTER: The use of in vivo and ex vivo compact magnetic resonance imaging (MRI) for the assessment of tumorigenicity following intrathecal transplantation of human embryonic stem cells

(hESC) in NOD-SCID mice. Schiffenbauer Yael, Amouyal Netanel, Ezov Nati, Steiner Michal, Izrael Michal, Lavon Neta, Hasson Arik, Revel Michel and **Nyska Abraham**. EUROPEAN SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, 2016, Barcelona, Spain

(237) POSTER: Trauma as a cause for hepatopathy in newborn Göttingen minipigs: a procedure-related finding complicating interpretation of toxicity studies. Ramot Yuval, Weber Klaus, Moreno Lobato Beatriz, Sánchez Margallo Francisco Miguel, Guillén Caro José Francisco, Dávila Gómez Luis, Shabat Roni and **Nyska Abraham**. EUROPEAN SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, 2016, Barcelona, Spain

(238) POSTER: 3D MRI-Based Histology Using Compact, High-Resolution MRI. Yael S. Schiffenbauer, Catherine Tempel-Brami, Rinat Abramovitch, **Abraham Nyska**, Robert Maronpot, SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, Portland, Oregon, USA, 2013

(239) POSTER: Quantitative Evaluation of Drug-Induced Microvascular Constriction in Mice Kidney Using a Novel Tool for 3D Geometrical Analysis of Ex Vivo Organ Vasculature. Raul Brauner, Yuval Ramot, Kongbin Kang,, John V. Heymach, Stacia Furtado,, **Abraham Nyska**. SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, Washington DC, 2014

(240) POSTER: Significant Lessening of Local Reactions Following Continuous SC Administration of ND0701, a New Apomorphine Formulation for Parkinson's Disease—MRI and Histopathology Studies. Ronit Shaltiel-Karyo, Hanita Ovadia, Yonit Tzarfati, Yael Schiffenbauer, **Abraham Nyska**, Oron Yacoby-Zeevi, SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, Washington DC, 2014

(241) POSTER: Trauma As a Cause for Hepatopathy in Newborn Göttingen Minipigs: A Procedure-Related Finding Complicating Interpretation of Toxicity Studies. Yuval Ramot, Klaus Weber, Beatriz Moreno Lobato, Francisco Miguel Sánchez Margallo, José Francisco Guillén Caro, Luis Dávila Gómez, Roni Shabat, **Abraham Nyska**. SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, San Diego, CA, USA, 2016

(242) The Use of In Vivo and Ex Vivo Compact Magnetic Resonance Imaging (MRI) for the Assessment of Tumorigenicity following Intrathecal Transplantation of Human Embryonic Stem Cells (hESC) in NOD-SCID Mice. Yael Schiffenbauer, Netanel Amouyal, Nati Ezov, Michal Steiner, Michal Izrael, Neta Lavon, Arik Hasson, Michele Revel, **Abraham Nyska**. SOCIETY OF TOXICOLOGIC PATHOLOGY SYMPOSIUM, San Diego, CA, USA, 2016