# CURRICULUM VITAE

## PAULETTE BERND, Ph.D.

**BIRTHPLACE:** New York, NY

**CITIZENSHIP:** USA

**EDUCATION:**

1975; AB; Colgate University, Hamilton, NY

1977; MA; Columbia University, New York, NY

1978; MPhil; Columbia University, New York, NY

1980; PhD; Columbia University, New York, NY

**Thesis Title:** The parafollicular cell of the thyroid gland: A model for studies of serotonin storage

**Sponsor:** Michael D. Gershon, MD

Ph.D. Dissertation, Columbia University, New York, NY, University Microfilms, Ann Arbor, Michigan

**POSTDOCTORAL TRAINING:**

1980-1982; Postdoctoral Fellow; Pharmacology/Neurotrophins; New York University School of Medicine, NY, NY; **Sponsor:** Lloyd A. Greene, PhD

**PROFESSIONAL SOCIETIES:**

American Association of Anatomists

American Association of Clinical Anatomists

International Association of Medical Science Educators

New York Academy of Science

Society of Ultrasound in Medical Education

**ACADEMIC APPOINTMENTS:**

1982-1987; Assistant Professor; Mount Sinai School of Medicine, New York, NY

1987-1991; Assistant Professor of Anatomy and Cell Biology; SUNY Downstate Medical Center, Brooklyn, NY

1991-2000; Associate Professor of Anatomy and Cell Biology; SUNY Downstate Medical Center, Brooklyn, NY

1994-2000; Associate Professor of Otolaryngology; SUNY Downstate Medical Center, Brooklyn, NY

2000-2007; Professor of Anatomy and Cell Biology; SUNY Downstate Medical Center, Brooklyn, NY

2000-2007; Professor of Otolaryngology; SUNY Downstate Medical Center, Brooklyn, NY

2007-2008; Distinguished Teaching Professor of Anatomy and Cell Biology, SUNY Downstate Medical Center, Brooklyn, NY

2007-2008; Distinguished Teaching Professor of Otolaryngology, SUNY Downstate Medical Center, Brooklyn, NY

2016-2019; Associate Medical Director, Simulation Center

2008-**present**; Professor of Pathology and Cell Biology, Columbia University, Vagelos College of Physicians and Surgeons, New York, NY

2009-**present**; Director, Clinical Gross Anatomy, Columbia University, Vagelos College of Physicians and Surgeons, New York, NY

2009-**present**; Distinguished Teaching Professor Emeritus, SUNY Downstate Medical Center, Brooklyn, NY

2013-**present**; Director; Anatomical Gift Program, Columbia University, Vagelos College of Physicians and Surgeons, New York, NY

**HONORS AND AWARDS:**

1980-1982; Pharmaceutical Manufacturers Association Foundation Postdoctoral Fellowship

1983; Mount Sinai School of Medicine Competitive Research Award

Sigma Xi

Beta Beta Beta Biological Society

2002-2003; Outstanding Educator of the Year of the Pre-Clinical Faculty (SUNY Downstate)

2007; Distinguished Teaching Professorship (conferred by the SUNY Board of Trustees)

2010; Distinguished Lecturer of the Year awarded by the P&S Class of 2013

2011; Finalist, Columbia Presidential Teaching Award (school-wide)

2013; Excellence in Medical Education Award; Best Short Communication in Pre-Clerkship Undergraduate Medical Education; Northeast Group of Educational Affairs (AAMC subgroup)

2013; Admitted to the Virginia Apgar Academy of Medical Educators of Columbia University College of Physicians & Surgeons

2015; Finalist, Columbia Presidential Teaching Award (school-wide)

2016; Inducted into Omicron Kappa Upsilon, the national dental honor society, by the College of Dental Medicine

2018: Charles W. Bohmfalk Award for Excellence in Teaching

2019: Stanley Baum Outstanding Poster Award; Association of University Radiologists

**GRANT SUPPORT:**

1983-1986; *In Vivo* Expression of NGF Receptors During Development; past; $131,633; National Institutes of Health

1984-1985; The Role of Neurotrophins During Neurulation; past; $9,000; Dysautonomia Foundation

1985-1986; The Role of Neurotrophins During Neurulation; past; $9,000; Dysautonomia Foundation

1986-1987; The Role of Neurotrophins During Neurulation; past; $9,000; Dysautonomia Foundation

1986-1988; The Role of Neurotrophic Factors in Early Ganglionic Development; past; $50,910; March of Dimes

1986-1991; Localization and Characterization of Nerve Growth Factor Receptors During Development; past; $105,000; National Science Foundation

1987-1988; The Role of Neurotrophins During Neurulation; past; $9,000; Dysautonomia Foundation

1988-1989; The Role of Neurotrophins During Neurulation; past; $9,000; Dysautonomia Foundation

1988-1990; The Role of Neurotrophic Factors in Early Ganglionic Development; past; $58,000; March of Dimes

1989; Nerve Growth Factor's Role in Inner Ear Development; past; $13,636; Deafness Research Foundation

1989-1990; The Role of Neurotrophins During Neurulation; past; $9,000; Dysautonomia Foundation

1990; Nerve Growth Factor's Role in Inner Ear Development; past; $13,636; Deafness Research Foundation

1991; Nerve Growth Factor's Role in Inner Ear Development past; $13,636; Deafness Research

Foundation
1992; Nerve Growth Factor's Role in Inner Ear Development past; $13,636; Deafness Research Foundation
1992-1993; The Role of Neurotrophins During Neurulation; past; $16,000; Dysautonomia Foundation
1993-1995; Localization and Characterization of Nerve Growth Factor Receptors During Development; past; $61,369, National Science Foundation
1993; Nerve Growth Factor's Role in Inner Ear Development; past; $13,636; Deafness Research Foundation
1993-1994; The Role of Neurotrophins During Neurulation; past; $17,000; Dysautonomia Foundation
1994-1995; The Role of Neurotrophins During Neurulation; past; $15,000; Dysautonomia Foundation
1995-1996; The Role of Neurotrophins During Neurulation; past; $15,000; Dysautonomia Foundation
1996; The Role of Neurotrophins in Cochlear and Vestibular Ganglia Development; past; $15,000; American Hearing Research Foundation
1996-1997; The Role of Neurotrophins During Neurulation; past; $10,000; Dysautonomia Foundation
1997; The Role of Neurotrophins in Cochlear and Vestibular Ganglia Development; past; $15,000; American Hearing Research Foundation
1998-1999; The Role of Neurotrophin-3 in Cardiac Development; past; $30,000; Rosenfeld Heart Foundation
1999-2003; The Role of Neurotrophins in Cardiac Development; past; $135,000; American Heart Association, Heritage Affiliate
2000-2001; The Role of Neurotrophin-3 in Cardiac Development; past; $10,000; Rosenfeld Heart Foundation
2001-2002; The Role of Neurotrophin-3 in Cardiac Development; past; $12,500; Rosenfeld Heart Foundation
2002-2003; The Role of Neurotrophin-3 in Cardiac Development; past; $12,500; Rosenfeld Heart Foundation
2003-2004; The Role of Neurotrophin-3 in Cardiac Development; past; $12,500; Rosenfeld Heart Foundation
2004-2005; The Role of Neurotrophin-3 in Cardiac Development; past; $6,250; Rosenfeld Heart Foundation
2005-2007; The Role of Neurotrophin-3 in Cardiac Development; past; $6,250; Rosenfeld Heart Foundation

## DEPARTMENTAL AND UNIVERSITY COMMITTEES:

### Columbia University VP&S -

2008-**present**; Fundamentals Curriculum Committee
2008-**present**; Fundamentals Directors and Support Committee
2008-**present**; Fundamentals Faculty Committee
2010-2016; Faculty Committee for the Design of the New Medical School Building
2011-**present**; Professionalism Task Force
2015-2016; Surgical Skills Center Planning Committee
2016-2018; LCME Committee on Education
2018-**present**; Faculty Council of Medicine

### Mount Sinai-

1985-1987; Director of Graduate Studies, Department of Anatomy

1985-1987; Executive Committee, Biomedical Sciences Doctoral Program

**SUNY Downstate-**

1988-1990; Advisory Committee on Research Allocations (Small Grants Committee)
1988-1992; Committee of the Faculty and Professional Staff of the School of Graduate Studies
1988-2000; Medical Scientist Training Program Admissions Committee (MD/PhD)
1988-2008; Faculty Recruitment Committee, Department of Anatomy and Cell Biology 1989-
2008; First Year Grades Committee
1989-1997; Chairperson, 1992-1994; Committee of Pre-Clinical Course Directors
1990; Neural and Behavioral Science Task Force Committee
1990-1991; Search Committee for the Dean of the College of Medicine
1990-1991; Coordinator of the Seminar Series in Neuroscience and Behavior
1990-1992; Presiding Officer, Committee of the Faculty and Professional Staff of the School of Graduate Studies
1991-1993; Committee on Educational Policy and Curriculum 1997-
1999; Executive Committee of the Faculty
2000-2008; Dean's Council for Education
2004-2005; Co-Chair, Faculty Personnel Policies Committee of the LCME Self-Study Task Force
2006-2008; Chair 2006-2007; 2000-2003; Chair 2002-2003; Committee on Academic and Professional Qualifications (Promotions Committee) – Responsible for the creation of a qualified (non-tenured) teaching track to allow promotion of faculty whose primary mission is teaching
2007; Chair, Faculty Development Committee for the LCME Self-Study
2007-2008; Co-Chair, Faculty Development Committee, Strategic Planning for the College of Medicine
2008; Member, Board of Directors, Clinical Practice Management Plan and University Physicians of Brooklyn

## TEACHING EXPERIENCE AND RESPONSIBILITIES:

**Columbia University-**

Medical and Dental School Courses:

2008-**present**; Course Director involving administration, lecturing and teaching of the **Clinical Gross Anatomy** Course given to first year medical and dental students. Responsible for the creation of a new Clinical Gross Anatomy Course implemented as a result of the new curriculum in the 2009/2010 academic year.
Innovations include:

- Creation of a media rich interactive electronic dissection manual with self-assessment and learning objectives for each lab
- Updating and delivery of all the Gross Anatomy lectures (~50)
- Introduced interactive audience response questions in advance of each lecture
- Designed and implemented weekly small group sessions emphasizing clinical reasoning & imaging
- Creation of interactive computer modules for small group study
- Introduction of hands-on ultrasound experiences throughout the course
- Implementation of group practical exams to encourage development of team work

- CT scanning of all donors and making them available in the lab for correlation with dissection
- Gross and microscopic pathological evaluation of tumors and anomalous structures identified during dissection
- Student preparation of an autopsy report of their donor
- Mentored numerous students for summer & scholarly projects
- Invitation of donor families to the annual memorial service
- Provided primary design requirements and worked closely with for architects to design the anatomy laboratory in the Vagelos Education Center
- Came up with the concept of using the lab as a surgical skills center, when not being used for Anatomy
- Identified and oversaw the installation of laboratory equipment, software & hardware required to outfit the facility

2010-2016; Lecturer in the Human Development Block of the Molecular Mechanisms Course.

2019- 2023; Lecturer in the Neuroscience Block of the Body in Health & Disease Course

**Supervision of Medical Student Scholarly Projects:**

Jesse Koskey, P&S 2015, "Drawing lessons may benefit first-year medical students studying anatomy or practicing surgical tasks"

Michael Certo, P&S 2016, "Prosections, Plastinates and Interactive Review Modules for the Clinical Gross Anatomy Curriculum"

Amy Liang, P&S 2018, "Integration of ultrasound into first-year anatomy curriculum"

Joshua Stein, P&S 2018, "Integration of ultrasound into first-year anatomy curriculum"

James Brunswick, P&S 2019, "Bedside Ultrasound Sessions: Building a Hands-On Curriculum for Preclinical Students"

Matthew White, P&S 2019, "Implementing a Longitudinal Point of Care Ultrasound Curriculum at Columbia VP&S"

**Mount Sinai-**

Medical School Course:

1982-1987; Gross Anatomy (lectures and lab)

Graduate School Courses:

1982-1987; Anatomy Laboratory Rotations

1982-1987; Introduction to Neurobiological Methods

1982-1987; Developmental Neurobiology

1983; Advanced Cell Biology

1985-1987; Anatomy Journal Club (in charge)

**SUNY Downstate-**

Medical School Courses:

1989-1994; Co-Director, Gross Anatomy Course

1992-1994; Co-Director, Embryology Course

1995-1997; Director, Gross Anatomy Course

1998-2008; Gross Anatomy Discipline Director

1998-2000; Co-Director, Blood/Lymph/Head and Neck Block
1998-2008; Director, Musculoskeletal Block (MS1)
1994-2008, Lecturer, Embryology
2007-2008; Co-Director, Gastrointestinal Block (MS1)

Graduate School Courses:

1987-2008; Current Concepts in Neuroscience
1989-2008; Molecular and Cellular Biology

**Albert Einstein College of Medicine-**

Medical School Course:

2008; Head & Neck Gross Anatomy (Laboratory Adjunct)
2009 - present; Skull Demonstration Session

Graduate School Course:

1996-1999; Developmental Neurobiology (Guest Lecturer)

**Thesis Sponsorships-**

1988-1993, Joycelyn Speight, MD, PhD - Department of Anatomy and Cell Biology - (defended successfully 12/93; currently an Assistant Clinical Professor and Vice-Chair at the University of California San Francisco's Mt Zion Comprehensive Cancer Center)
1990-1991; Mohammed Mujeeb - PhD candidate - Department of Anatomy and Cell Biology - (transferred to Loyola University, School of Dentistry)
1991-1995; Lihua Yao, PhD - Graduate Program in Neural and Behavioral Science - (defended successfully 11/95; currently an Associate Professor in the Department of Ophthalmology & Vision Science at the University of Arizona's College of Medicine)
1991-1996; Damin Zhang, PhD - Graduate Program in Neural and Behavioral Science (defended successfully 5/96; currently an R&D Scientist at Novo Nordisk, Princeton, NJ)
1994-2000, Rong Li, PhD - Graduate Program in Neural and Behavioral Science (defended successfully 4/00, currently working in Quality Control at ImClone, New York, NY)

**Postdoctoral Fellows-**

2000-2004, Saihan Borghid, PhD (currently an Associate Professor in the Department of Biology, Chemistry and Environmental Studies, Molloy College, Rockville Centre, NY)

**OTHER PROFESSIONAL ACTIVITIES:**

Ad hoc reviewer for the following journals:

Anatomical Sciences Education
Brain Research
Development
Developmental Biology
Journal of Experimental Zoology
Journal of Histochemistry and Cytochemistry
Journal of Neurobiology
Journal of Neurochemistry
Journal of Neuroscience

Ad hoc reviewer for the National Science Foundation

1990-1991; Chairman, Section of Neuroscience, New York Academy of Science
1991-1994; Vice Chair, Section of Neuroscience, New York Academy of Science
1997; Veterans Administration, Study Section
2008-2010; American Association of Anatomists Postdoctoral Fellowship Selection Committee
2012-2015; American Association of Anatomists Educational Affairs Committee
2012-2015; Chair, Anatomical Committee of the Associated Medical Schools of New York
2013; External Examiner for Kuwait University School of Medicine
2012-present; Voting member, Anatomical Committee of the Associated Medical Schools of New York
2014; Co-Founder of the International Collaboration and Exchange Program
2016; Co-Organizer of the Regional Meeting of the American Association of Anatomists
2017-present; Member, Virginia Kneeland Frantz Society for Women Faculty at Columbia University
2023-2024; Mastering Medical Teaching Course, Stanford School of Medicine, Stanford Center for Health Education Badge Certificate, Online Faculty Development with Group Debrief

**MEDIA COVERAGE:**

Columbia Magazine, "The Benefits of Donating Your Body to Medical Science" by Paul Hond, August 26th, 2024

Boston Globe,U "Anatomical Donor Programs are Crucial to the Next Generation of Physicians," July 15, 2023; https://www.bostonglobe.com/2023/07/15/opinion/anatomical-donor-programs-are-crucial-training-next-generation-physicians/?p1=BGSearch_Overlay_Results

New York Times, "Honoring the Body Donors Who Are a Medical Student's 'First Patient' by April Rubin; May 31, 2023 https://www.nytimes.com/2023/05/31/science/donor-bodies-medical-school-appreciation.html

AAMCNews, "Compassion Begins with the Cadavers;" https://news.aamc.org/medical-education/article/compassion-begins-cadavers/; April 5th, 2019

The iBooks Author Conference, "iBA's Anatomy: iBooks Author And Health Care" by Bradley Metrock; http://www.ibooksauthorconference.com/ - !iBAs-Anatomy-iBooks-Author-And-Health-Care/c1v65/54e74d590cf2d691d211dc2e; February 20th, 2015

HuffPost Science, "Synthetic Cadavers Offer An Equally Creepy Alternative To The Real Thing;" http://www.huffingtonpost.com/2015/05/26/synthetic-cadavers-video_n_7382952.html; May 26th, 2015

MEDCITY News, "Wow of the Week: Medical school honors donated bodies, but how long before virtual dissections dominate?"; http://medcitynews.com/2014/10/medical-school-honors-donated-bodies-but-how-long-before-virtual-dissections-dominate/; October 4th, 2014

Columbia CNMTL Faculty Spotlight, "Building a Better Gross Anatomy Dissector with iBooks"; http://ccnmtl.columbia.edu/enhanced/faculty_spotlight/building_a_better_gross_anatomy_dissector_with_ibooks.html; June 2nd, 2014

Columbia University College of Physicians & Surgeons website, News, "Anatomy Manual Created by P&S Students & Professor Now Available on iBooks"; May 1st, 2014; http://newsroom.cumc.columbia.edu/blog/2014/05/01/anatomy-dissection-manual/

Voice of America, "Med Students Honor 'First Patient' Body Donors"; Adam Phillips; May 28th, 2013; http://www.voanews.com/content/medical-students-honor-first-patient-body-donors/1669748.html

Columbia Medicine, "Gross Anatomy 2.0"; Spring 2013, pg. 12; http://www.columbiamedicinemagazine.org/ps-news/spring-2013/gross-anatomy-20

Columbia University College of Physicians & Surgeons website, News, "Anatomy Courses Crucial for Physician Training"; http://newsroom.cumc.columbia.edu/blog/2013/09/05/educating-

tomorrows-physicians/; September 5th, 2013

Wall Street Journal, "Teaching Anatomy in a Digital Age; At Columbia Medical School Students are Experimenting with a New Way to do Dissection"; October 9th, 2013, pg. R6; http://online.wsj.com/news/articles/SB10001424052702303722604579111211766455066

Scarsdale Inquirer, "Anatomically Correct; Scarsdalians Create iPad Anatomy Manual"; October 18th, 2013, pp. 1 & 10

Columbia Medicine, "Gross Anatomy Modernized"; 2013 Annual Report, pg. 17

Columbia University College of Physicians & Surgeons website, News, "A New Take on Gross Anatomy"; May 30th, 2012; http://ps.columbia.edu/news/new-take-gross-anatomy

Columbia Medicine Online Extras, "The New Anatomy: Impressions of a First-Year Medical Student"; April 2010; http://www.cumc.columbia.edu/psjournal/columns/april-2010-perspectives-class-2013

Columbia University College of Physicians & Surgeons website, News, "Essential Art for Medical Students"; December 20, 2010; http://ps.columbia.edu/news/essential-art-medical-students

**PUBLICATIONS (asterisks indicate first or last author)**

**iBooks:**

*Columbia University Clinical Gross Anatomy Dissection Manual: A Concise Student-Centric Dissector for a 21st Century Curriculum – Pectoral Region, Back & Upper Limb; P. Bernd, editor; 2017, Apple Store, Upper Limb & Back

*Columbia University Clinical Gross Anatomy Dissection Manual: A Concise Student-Centric Dissector for a 21st Century Curriculum – Lower Limb; P. Bernd, editor; 2017; Apple Store, Lower Limb

*Columbia University Clinical Gross Anatomy Dissection Manual: A Concise Student-Centric Dissector for a 21st Century Curriculum – Head & Neck; P. Bernd, editor; 2017, Apple Store, Head & Neck

*Columbia University Clinical Gross Anatomy Dissection Manual: A Concise Student-Centric Dissector for a 21st Century Curriculum – Thorax; P. Bernd, editor; 2017, Apple Store, Thorax

*Columbia University Clinical Gross Anatomy Dissection Manual: A Concise Student-Centric Dissector for a 21st Century Curriculum – Abdomen; P. Bernd, editor; 2017, Apple Store, Abdomen

*Columbia University Clinical Gross Anatomy Dissection Manual: A Concise Student-Centric Dissector for a 21st Century Curriculum – Pelvis & Perineum; P. Bernd, editor; 2017, Apple Store, Pelvis & Perineum

*Gross Anatomy Practice Practical Questions, P. Bernd; 2014, Apple Store, Practice Practical Questions

**Original Peer Reviewed Articles:**

*1. Bernd, P., Gershon, M.D., Nunez, E.A., and Tamir, H.; Localization of a highly specific neuronal protein, serotonin binding protein, in thyroid parafollicular cells; Anat. Rec.; 1979; 193:257-268.

2. Goodrich, J.T., Bernd, P., Sherman, D., and Gershon, M.D.; Phylogeny of enteric serotonergic neurons. J. Comp. Neurol.; 1980; 190:15-28.

*3. Bernd, P., Gershon, M.D., Nunez, E.A., and Tamir, H.; Separation of dissociated thyroid follicular and parafollicular cells: Association of serotonin binding protein with parafollicular cells; J. Cell Biol.; 1981; 88:499-508.

*4. Bernd, P., and Greene, L.A.; Electron microscopic radioautographic localization of iodinated nerve growth

factor bound to and internalized by PC12 cells; J. Neurosci.; 1983; 3:631-643.

5. Greene, L.A., Bernd, P., Black, M.M., Burstein, D.E., Connolly, J.L., Rukenstein, A., and Seeley, P.J.; Genomic and non-genomic actions of nerve growth factor in development; Prog. Brain Res.;1983; 58:347-357.

6. Sheperd, V.L., Stahl, P.D., Bernd, P., and Rabinovitch, M.; Receptor mediated entry of ß-glucuronidase into the parasitophorous vacuoles of macrophages infected with *Leishmania Mexicana Amazonensis*; J. Exp. Med.; 1983; 157:1471-1482.

*7. Bernd, P., and Greene, L.A.; Association of $^{125}$I-NGF with PC12 pheochromocytoma cells: Evidence for internalization via high-affinity receptors only and for long-term regulation of both high- and low-affinity receptors; J. Biol. Chem.; 1984; 259:15509-15516.

*8. Bernd, P.; Appearance of nerve growth factor receptors on cultured neural crest cells; Dev. Biol.; 1985; 112:145-156.

*9. Bernd, P.; Characterization of nerve growth factor binding to cultured neural crest cells: Evidence of an early developmental form of the NGF receptor; Dev. Biol.; 1986; 115:415-424.

10. Sonnenfeld, K.H., Bernd, P., Rubenstein, A.E., and Sobue, G.; Nerve growth factor binding to cells derived from neurofibromas; Ann. N. Y. Acad. Sci.; 1986; 486:107-114.

11. Sonnenfeld, K.H., Bernd, P., Sobue, G., Lebwohl, M., and Rubenstein, A.E.; Nerve growth factor receptors on dissociated neurofibroma Schwann-like cells; Cancer Res.; 1986; 46:1446-1452.

*12. Bernd, P.; Neuron-like cells in long-term neural crest cultures are not targets of nerve growth factor; Dev. Brain Res.; 1987; 33:31-38.

*13. Bernd, P.; Selective expression of high affinity nerve growth factor receptors on tyrosine hydroxylase-containing neuron-like cells in neural crest cultures; J. Neurosci.; 1988; 8:3549-3555.

*14. Bernd, P., Martinez, H.J., Dreyfus, C.F., and Black, I.B.; Localization of high-affinity and low-affinity nerve growth factor receptors in cultured rat basal forebrain; Neurosci.; 1988; 26:121-129.

*15. Bernd, P.; Catecholaminergic cells and support cell precursors in neural crest cultures differentially express nerve growth factor receptors; Int. J. Dev. Neurosci.; 1989; 7:449-463.

*16. Bernd, P., and Represa, J.; Characterization and localization of nerve growth factor receptors in the embryonic otic vesicle and cochleovestibular ganglion. Dev. Biol.; 1989; 134:11-20.

17. Dreyfus, C.F., Bernd, P., Martinez, H.J., Rubin, S.J., and Black, I.B.; GABA-ergic and cholinergic neurons exhibit high-affinity nerve growth factor binding in rat basal forebrain; Exp. Neurol.; 1989; 104:181-185.

*18. Represa, J., and Bernd, P.; Nerve growth factor and serum differentially regulate development of the embryonic otic vesicle and cochleovestibular ganglion *in vitro*; Dev. Biol.; 1989; 134:21-29.

19. Lefebvre, P.P., Van De Water, T.R., Represa, J., Liu, W., Bernd, P., Modlin, S., Moonen, G., and Mayer,

M.B.; Temporal pattern of nerve growth factor (NGF) binding *in vivo* and the *in vitro* effects of NGF on cultures of developing auditory and vestibular neurons; Acta Otolaryngol. (Stockh); 1991; 111:304-311.

*20. Represa, J., Van De Water, T.R., and Bernd, P.; Temporal pattern of nerve growth factor receptor expression in developing cochlear and vestibular ganglia in quail and mouse; Anat. Embryol.; 1991; 184:421-432.

*21. Speight, J.L., Yao, L., Rozenberg, I., and Bernd, P.; Early embryonic quail dorsal root ganglia exhibit high affinity nerve growth factor binding and NGF responsiveness - Absence of NGF receptors on migrating neural crest cells; Dev. Brain Res.; 1993; 75:55-64.

*22. Bernd, P., Zhang, D., Yao, L., and Rozenberg, I.; The potential role of nerve growth factor, brain-derived neurotrophic factor and neurotrophin-3 in avian cochlear and vestibular ganglia development; Int. J. Dev. Neurosci.; 1994; 12:709-723.

23. Qiu, L., Bernd, P., and Fukada, K.; Cholinergic neuronal differentiation factor (CDF)/leukemia inhibitory factor (LIF) binds to specific regions of the developing nervous system *in vivo*; Dev. Biol.; 1994; 163:516-520.

*24. Yao, L., Zhang, D., and Bernd, P.; The onset of neurotrophin and *trk* mRNA expression in early embryonic tissues of the quail; Dev. Biol.; 1994; 165:727-730.

*25. Zhang, D., Yao, L., and Bernd, P.; Expression of *trk* and neurotrophin mRNA in dorsal root and sympathetic ganglia of the quail during development; J. Neurobiol.; 1994; 25:1517-1532.

*26. Zhang, D., Yao, L., and Bernd, P.; Expression of neurotrophin *trk* and p75 receptors in quail embryos undergoing gastrulation and neurulation; Dev. Dynam.; 1996; 205:150-161.

27. Qiu, L., Towle, M. F., Bernd, P., and Fukada, K.; Distribution of cholinergic neuronal differentiation factor/leukemia inhibitory factor binding sites in the developing and adult rat nervous system *in vivo*; J. Neurobiol.; 1997; 32:163-192.

*28. Yao, L., Zhang, D., and Bernd, P.; Differential regulation of substance P by all members of the NGF family of neurotrophins in avian dorsal root ganglia throughout development; Neurosci.; 1997; 79:1197- 1206.

*29. Bernd, P. and Li, R.; Differential expression of *trk*C mRNA in the chicken embryo from gastrulation to development of secondary brain vesicles; Dev. Brain Res.; 1999; 116:205-209.

*30. Li, R. and Bernd, P.; Neurotrophin-3 increases neurite outgrowth and apoptosis in explants of the chicken neural plate; Dev. Neurosci.; 1999; 21:12-21.

*31. Brumwell, C.L., Hossain, W.A., Morest, D.K., and Bernd, P.; Role for basic fibroblast growth factor (FGF-2) in tyrosine kinase (TrkB) expression in the early development and innervation of the auditory receptor: *in vitro* and *in situ* studies; Exp. Neurol.; 2000; 162:121-145.

*32. Bernd, P., Miles, K., Rozenberg, I., Borghjid, S. and Kirby, M.L; Neurotrophin-3 and TrkC are expressed

in the outflow tract of the developing chicken heart; Dev. Dynam.; 2004; 230:767-772.

*33. Bernd, P. and Jakway, J.; A simplified approach to teaching medical students ocular movements and the rationale in testing the oculomotor, trochlear and abducent nerves; Anat. Sci. Ed.; 2008; 1:126-129.

34. Aimé, P., Sun, X., Zareen, N., Rao, A., Berman, Z., Volpicelli-Daley, L., Bernd, P., Crary, J.F., Levy, O.A. and Greene, L.A.; Trib3 is elevated in Parkinson's disease and mediates death in Parkinson's disease models; J. Neurosci.; 2015; 29:10731-10749; DOI: https://doi.org/10.1523/JNEUROSCI.0614-15.2015

*35 Wu, A., Kielstein, H., Sakurai, T., Noel, G., Viranta-Kovanen, S., Chien, C., and Bernd, P.; Internationalization of Medical Education - Building a Program to Prepare Future Leaders in Healthcare; Med. Sci. Educator; 2019; 29:535-547; DOI: https://doi.org/10.1007/s40670-019-00695-4

36. Gölkel C., Wu, A., Chiuzan C., Duong J., Bernd P., Kielstein H.; Early internationalization of students in a German medical school in the former GDR via the Clinical Anatomy course. Annals Anat.; 2019; 225:42-47; DOI: 10.1016/j.aanat.2019.03.004

*37. Wu, A., Noel, G.P.J.C., Wingate, R., Kielstein, H., Sakurai, T., Viranta-Kovanen, S, Chien, C.L., Traxler, H., Waschke, J., Vielmuth, F., Sagoo, M.G., Kitahara, S., Kato, Y., Keay, K.A., Olsen, J., Bernd, P.; An International Partnership of 12 Anatomy Departments – Improving Global Health through Internationalization of Medical Education. Annals of Global Health; 2020, 86:27, 1-14; DOI: https://doi.org/10.5334/aogh.2665

*38. Utukuri, P.S., Lefkowitch, J.H., Erde, S.M., Smithgall, M.C., Makkar, J., Weintraub, J.L., Bernd, P.; Student-Authored Autopsy Reports of Anatomical Donors, Their First Patients. Med. Sci. Educator. 2020; 30:1405-1411; DOI: https://doi.org/10.1007/s40670-020-01054-4

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