BI 358 Discussion Session 8

I. Attendance + Q?

II. Quiz 4

III. Feedback on papers (update).

IV. Additional Assignment: Endocrine case history (pp 8-2 thru 8-7 DLN) to prepare for Dr. Cirullo’s lecture this Thursday! 😊...Yahoo!

Go work on your presentations & papers & maybe relax?!
Additional Research Paper Tips

• UO Library web site: http://library.uoregon.edu
  ➢ Articles (It’s a tab!)
    ➢ Databases (A-Z) (Link, bottom right hand corner of box with Article’s tab)
      ➢ Web of Science
      ➢ Pubmed
      ➢ Google Scholar
  – Citing heavily from the wrong source?
    • Reviews
    • Primary literature too old/dated.
      – Prefer at least some >2010-2013

• WR320 Scientific & Technical Writing (Offered Spring 2013!)
  – Chicago Guide to Communicating Science (by S. L. Montgomery)

• Avoid repetitive word choice. Be concise.
• References- Be Consistent!!! Spacing, notation, etc.
  – Preferably in a scientific notation format.
• Working on transitions:
  – http://writingcenter.unc.edu/handouts/transitions/
• How to write like a scientist (fun read):
  – http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2012_03_23/caredit.a1200033
ESTROGEN-REGULATED SYNTHESIS OF NEUROTENSIN IN NEUROSECRETORY-CELLS OF THE HYPOTHALAMIC ARCUATE NUCLEUS IN THE FEMALE RAT

Author(s): ALEXANDER, M (ALEXANDER, MJ)
Source: ENDOCRINOLOGY Volume: 133 Issue: 4 Pages: 1809-1816 DOI: 10.1210/en.133.4.1809 Published: OCT 1993

Abstract: Neotensin (NT) is implicated as a neurohormone in mammals, yet the peptide's neuroendocrine role remains to be determined. NT immunoreactivity has been observed in neurosecretory cells of the arcuate nucleus and paraventricular nucleus, and data suggest that NT release into hypophysial portal blood mediates a component of PRL secretion that is female specific and dependent on ovarian steroids. In the present study, in situ hybridization histochemistry and immunohistochemistry were used to investigate the regulation of NT gene expression in hypothalamic neurosecretory regions of adult rats. In ovariectomized females, estradiol induced expression of messenger RNA (mRNA) encoding NT and neuropeptide-Y (N/NT mRNA) in the dorsomedial division of the arcuate nucleus. In contrast, estradiol did not appreciably alter NT/N mRNA expression in the ventrolateral division of the arcuate nucleus, where labeled cells were numerous, or in the paraventricular nucleus, where labeled cells were virtually absent. Estradiol also increased NT immunoreactivity in the external zone of the median eminence, confirming the neuroendocrine phenotype of NT cells in the dorsomedial division, as well as estrogen-regulated synthesis of NT in this system. In the dorsomedial division of cycling females, NT/N mRNA-expressing cells were significantly more numerous at proestrus than at estrus, consistent with differences in plasma estradiol levels at these stages. In this same region, NT/N mRNA-expressing cells were significantly more numerous in proestrus females than in gonad-intact males. These results imply that estrogen-regulated release of NT at the median eminence subserves one or more sexually differentiated functions and are consistent with the involvement of tuberoinfundibular NT in estrogen-dependent secretion of PRL or GnRH on the afternoon of proestrus.

Accession Number: WOSA1993MA41100044
Document Type: Article
Language: English

KeyWords Plus: HORMONE-RELEASING HORMONE; MESSENGER-RNA LEVELS; NEUROMEDIN-N; PROLACTIN-RELEASE; LUTEINIZING-HORMONE; MEDIAN-EMINENCE; PREOPTIC AREA; PARAVENTRICULAR NUCLEUS; IMMUNOREACTIVE NEURONS; ANTERIOR-PITUITARY

Reprint Address: ALEXANDER, MJ (reprint author), BOSTON UNIV, SCH MED, DEPT PHARMACOL & EXPTL THERAPEUT, 80 E CONCORD ST, BOSTON, MA 02118, USA.
Publisher: ENDOCRINOLOGY SOC, 4350 EAST WEST HIGHWAY SUITE 500, BETHESDA, MD 20814-4110

Web of Science Categories: Endocrinology & Metabolism
Research Areas: Endocrinology & Metabolism
IDS Number: MA411
ISSN: 0013-7227
The regulatory role of neurotensin on the hypothalamic-anterior pituitary axons: Emphasis on the control of thyroid-related functions

Author(s): Stolakis, V [Stolakis, Vasileios] [1]; Kalafatakis, K [Kalafatakis, Konstantinos] [1]; Botis, J [Botis, John] [1]; Zarros, A [Zarros, Apostolos] [1]; Liapi, C [Liapi, Charis] [1]

Source: NEUROPEPTIDES Volume: 44 Issue: 1 Pages: 1-7 DOI: 10.1016/j.nepep.2009.09.005 Published: FEB 2010

Times Cited: 5 (from Web of Science)

Abstract: Neurotensin (NT) is a 13 amino acid neurohormone and/or neuromodulator, located in the synaptic vesicles and released from the neuronal terminals in a calcium-dependent manner. This peptide is present among mammalian and nonmammalian species, mainly in the central nervous system and the gastrointestinal tract. Due to its neuroendocrine activity, NT has been related to the pathophysiology of a series of disorders, such as schizophrenia, drug-abuse, Parkinson's disease, cancer, strokes, and other neurodegenerative conditions. Moreover, NT participates in the physiology of pain-induction, central blood pressure Control and inflammation. NT also plays an important interactive role in all components of the hypothalamic-anterior pituitary circuit, which is mediated by an endocrine, paracrine or autocrine manner, towards most of the anatomical regions that define this circuit. A considerable amount of data implicates NT in thyroid-related regulation through this circuit, the exact mechanisms of which should be further investigated for the potential development of more targeted approaches towards the treatment of thyroid-related endocrine diseases. The aim of this study was to provide an up-to-date review of the literature concerning the regulatory role of NT on the hypothalamic-anterior pituitary axons, with an emphasis on the control of thyroid-related functions. (C) 2008 Elsevier Ltd. All rights reserved.

Accession Number: WOS:0000274819500001
Document Type: Review
Language: English
>Publications that have cited that review (or article)!</>
**Course Data**

**WR 320  Scientific & Techn Wr**  4.00 cr.
Emphasis on form, function, and style of scientific, professional, and technical writing; weekly writing assignments include proposals, reports, definitions, instructions, summaries. Use of documentation in publication.

Grading Options: Graded for Majors; Optional for all other students
Instructor: Boscha T
Office: 236 PLC
Phone: (541) 346-0056

Only Open to Majors Within: College of Arts & Sciences
(before 03/07)
Not Open to: Freshman, Sophomore
Prereq/Comments: Prereq: Completion of University Writing Requirement; junior standing.

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**Academic Deadlines**

**Deadline**  
March 31: Process a complete drop (100% refund, no W recorded)
April 7: Drop this course (100% refund, no W recorded)
April 7: Process a complete drop (90% refund, no W recorded)
April 8: Drop this course (75% refund, no W recorded; after this date, Ws are recorded)
April 8: Process a complete drop (75% refund, no W recorded; after this date, Ws are recorded)
April 10: Add this course
April 10: Last day to change to or from audit
April 14: Withdraw from this course (75% refund, W recorded)
April 21: Withdraw from this course (50% refund, W recorded)
April 28: Withdraw from this course (25% refund, W recorded)
May 19: Withdraw from this course (0% refund, W recorded)
May 19: Change grading option for this course

⚠️ You can’t drop your last class using the “Acid/Drop” menu in DuckWeb. Go to the “Completely Withdraw from Term/University” link to begin the complete withdrawal process. If you need assistance with a complete drop or a complete withdrawal, please contact the Office of Academic Advising, 364 Oregon Hall, 541-346-3211 (8 a.m. to 5 p.m., Monday through Friday). If you are attempting to completely withdraw after business hours, and have difficulty, please contact the Office of Academic Advising the next business day.