

CURRICULUM VITAE

Ty Carroll MD

**Associate Professor
Department of Medicine
Division of Endocrinology**

OFFICE ADDRESS:

Community Memorial Hospital
W180 N8000 Town Hall Rd
Menomonee Falls, WI 53051

EDUCATION:

08/1994 - 05/1998 B.S. Biochemistry, University of Wisconsin, Madison, WI
08/1998 - 05/2002 M.D., Medical College of Wisconsin, Milwaukee, WI

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

07/2002 - 06/2005 Resident, Internal Medicine, Medical College of Wisconsin and Affiliated Hospitals, Milwaukee, WI
07/2006 - 06/2008 Fellow, Endocrinology, Metabolism, and Clinical Nutrition, Medical College of Wisconsin and Affiliated Hospitals, Milwaukee, WI

FACULTY APPOINTMENTS:

07/2005 - 06/2006 Clinical Instructor (Chief Medical Resident), Medicine, Medical College of Wisconsin, Milwaukee, WI
07/2008 - 12/2014 Assistant Professor, Endocrinology Center and Clinics, Medical College of Wisconsin, Milwaukee, WI
01/2015 - 07/2021 Assistant Clinical Professor, Endocrinology Center and Clinics, Froedtert and the Medical College of Wisconsin, Milwaukee, WI
07/2021 - Present Associate Professor, Medicine, Endocrinology, Diabetes, and Molecular Medicine, Medical College of Wisconsin, Milwaukee, WI

EDUCATIONAL ADMINISTRATIVE APPOINTMENTS:

07/2021 - Present Endocrinology Fellowship Program Director, Medical College of Wisconsin, Milwaukee, WI

HOSPITAL STAFF PRIVILEGES:

07/2005 - 06/2006 Milwaukee VA Medical Center, 5000 West National Avenue, Milwaukee, WI 53295
07/2005 - 06/2006 Froedtert Memorial Lutheran Hospital, 9200 W. Wisconsin Avenue, Milwaukee, WI 53226
08/2007 - 06/2008 Aurora St. Luke's Medical Center, 2900 W. Oklahoma Avenue, Milwaukee, WI 53215
07/2008 - Present Froedtert Hospital- Menomonee Falls, W180 N8085 Town Hall Road, Menomonee Falls, WI 53051
10/2009 - 01/2016 Wheaton Franciscan St. Francis Hospital, 3237 S. 16th Street, Milwaukee, WI 53215
07/2011 - 01/2017 Waukesha Memorial Hospital, 725 American Ave, Waukesha, WI 53188

SPECIALTY BOARDS AND CERTIFICATION:

<u>Board Certified</u>	<u>Issue Date</u>	<u>Expiration</u>
American Board of Internal Medicine	08/2006	08/2016
ABIM-Endocrinology	09/2008	09/2018

ABIM-Endocrinology 09/2018 09/2028

<u>Licensure</u>	<u>Number</u>	<u>Issue Date</u>	<u>Expiration</u>
Wisconsin License	(#46886-020)	05/17/2004	10/31/2023

AWARDS AND HONORS:

2002 - Present Alpha Omega Alpha Honors Society
2003 Department of Internal Medicine Intern of the Year
2004 Department of Internal Medicine-Resident Top Ten Teaching Award
2007 - 2008 MCW Outstanding Medical Student Teacher Award
2008 Department of Internal Medicine-Best Teaching Fellow
2008 Merck Outstanding Abstract Award
2011 - 2014 MCW Outstanding Medical Student Teacher Award
2012 - 2024 Milwaukee Magazine Top Doctors- Endocrinology
2016 - 2023 Selected to "Best Doctors" in America
2018 - 2019 MCW Outstanding Medical Student Teacher Award
2022 - 2024 MCW Outstanding Medical Student Teacher Award

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

2005 - 2008 Wisconsin State Medical Society
2005 - 2008 American Medical Association
2006 - Present The Endocrine Society
2007 - Present American Association of Clinical Endocrinologists
2013 - 2019 American Diabetes Association
2021 - Present Association of Program Directors in Diabetes, Endocrinology, and Metabolism

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

Local

What Do You Need to Know About Subclinical Thyroid Disease and Thyroid Nodules in 2022, Endocrine Update 2022, Milwaukee, WI, 11/04/2022

Regional

ACP Midwest Internal Medicine Board Review, Endocrinology Section, Schaumburg

PEER REVIEWED WORKSHOPS/PRESENTATIONS:

National

Carroll T, Raff H, Findling JW, Nocturnal Salivary Cortisol in the Diagnosis of Cushing's Syndrome: A Meta-Analysis. Endo 2008, San Francisco, 06/2008 - Present

MEDICAL COLLEGE TEACHING ACTIVITIES:

Community/Lay Public

09/2008 - Present Community Memorial Medical Commons Community Education, Thyroid Facts and Fiction

Medical Student Education

04/7 - Present Department of Pathology, M2 Curriculum: Clinical Correlation Pituitary Disease
04/8 - Present Department of Pathology, M2 Curriculum: Clinical Correlation Adrenal Disease

Resident and Fellow Education

03/2006 - Present Department of Internal Medicine Ambulatory Curriculum: Outpatient Diabetes Management.
09/2008 - Present Department of Medicine Core Curriculum: Male Hypogonadism
2019 Core Curriculum Lectures for Fellows (total 1 hour of lectures): "Thyroid Cancer for Dummies"

2020 Core Curriculum Lectures for Fellows (total 1 hour of lectures): "Adrenal Nodular Disease"
2021 Core Curriculum Lectures for Fellows (total 6 hours of lectures): "Sellar Masses", "US and FNA Basics", "Hyperthyroidism", "Hypothyroidism", "Intro to Research", "Sellar Masses"

Continuing Medical Education

03/2008 - Present Department of Neurosurgery Grand Rounds,
11/2008 - Present St. Joseph's West Bend Grand Rounds, Thyroid Nodules: Diagnosis and Management
03/2009 - Present Columbia St. Mary's Hospital Grand Rounds, Thyroid Nodules: Diagnosis and Management
Osteoporosis: Practical Implications and Recommendations

COMMUNITY SERVICE ACTIVITIES:

06/2017 - 03/2021 JDRF Board of Directors for the Southeastern Wisconsin Chapter
06/2017 - 03/2021 Vice President of Outreach and Education for the JDRF Southeastern Wisconsin Chapter

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. Gawrieh S, Carroll T, Hogan WJ, Soergel KH, Shaker R, (2005) Swallow Syncope in Association with Schatzki Ring and Hypertensive Esophageal Peristalsis: Report of Three Cases and Review of the Literature, *Dysphagia*: 20: 273-277.
2. Carroll T, Raff H, Findling JW. (2008) Late-night salivary cortisol measurement in the diagnosis of Cushing's syndrome. *Nature Clinical Practice Endocrinology & Metabolism* 6:344-350.
3. Carroll TB, Javorsky BR, Findling JW. POSTSURGICAL RECURRENT CUSHING DISEASE: CLINICAL BENEFIT OF EARLY INTERVENTION IN PATIENTS WITH NORMAL URINARY FREE CORTISOL. *Endocr Pract.* 2016 Oct;22(10):1216-1223.
4. La J, Wang TS, Hammad AY, Burgardt L, Doffek K, Carr AA, Shaker JL, Carroll TB, Evans DB, Yen TW. Parathyroidectomy for primary hyperparathyroidism improves sleep quality: A prospective study. *Surgery.* 2017 Jan;161(1):25-34.
5. Carroll TB, Peppard WJ, Herrmann DJ, Javorsky BR, Wang TS, Patel H, Zarnecki K, Findling JW. Continuous Etomidate Infusion for the Management of Severe Cushing Syndrome: Validation of a Standard Protocol. *J Endocr Soc.* 2019 Jan 01;3(1):1-12. PMID: PMC6291660
6. Kannankeril J, Carroll T, Findling JW, Javorsky B, Gunsolus IL, Phillips J, Raff H. Prospective Evaluation of Late-Night Salivary Cortisol and Cortisone by EIA and LC-MS/MS in Suspected Cushing Syndrome. *J Endocr Soc.* 2020 Oct 01;4(10):bvaa107. PMID: PMC7480956
7. Javorsky BR, Raff H, Carroll TB, Algeciras-Schimmich A, Singh RJ, Colón-Franco JM, Findling JW. New Cutoffs for the Biochemical Diagnosis of Adrenal Insufficiency after ACTH Stimulation using Specific Cortisol Assays. *J Endocr Soc.* 2021 Apr 01;5(4):bvab022. PMID: PMC7975762
8. Javorsky BR, Raff H, Carroll TB, Algeciras-Schimmich A, Jit Singh R, Colón-Franco JM, Findling JW. Response to the Letter to the Editor From Jialal and Sood: "New Cutoffs for the Biochemical Diagnosis of Adrenal Insufficiency After ACTH Stimulation Using Specific Cortisol Assays". *J Endocr Soc.* 2021 Sep 01;5(9):bvab113. PMID: PMC8279072
9. Gawrieh S, Carroll T, Hogan WJ, Soergel KH, Shaker R. Swallow syncope in association with Schatzki ring and hypertensive esophageal peristalsis: report of three cases and review of the literature. *Dysphagia.* 2005;20(4):273-7.
10. Carroll T, Raff H, Findling JW. Late-night salivary cortisol measurement in the diagnosis of Cushing's syndrome. *Nat Clin Pract Endocrinol Metab.* 2008 Jun;4(6):344-50.
11. Carroll T, Raff H, Findling JW. Late-Night Salivary Cortisol for the Diagnosis of Cushing's Syndrome: A Meta-Analysis. *Endocr Pract.* 2009 May 6:1-17.
12. Carroll TB, Findling JW. Cushing's syndrome of nonpituitary causes. *Curr Opin Endocrinol Diabetes Obes.* 2009 Aug;16(4):308-15.
13. Carroll T, Raff H, Findling JW. Late-night salivary cortisol for the diagnosis of Cushing syndrome: a meta-analysis. *Endocr Pract.* 2009;15(4):335-42.
14. Carroll TB, Findling JW. The diagnosis of Cushing's syndrome. *Rev Endocr Metab Disord.* 2010 Jun;11(2):147-53.

15. Carroll T, Findling JW. The use of mifepristone in the treatment of Cushing's syndrome. *Drugs Today (Barc)*. 2012 Aug;48(8):509-18.
16. Wang TS, Evans DB, Fareau GG, Carroll T, Yen TW. Effect of prophylactic central compartment neck dissection on serum thyroglobulin and recommendations for adjuvant radioactive iodine in patients with differentiated thyroid cancer. *Ann Surg Oncol*. 2012 Dec;19(13):4217-22.
17. Cornell RF, Kelly DF, Bordo G, Carroll TB, Duong HT, Kim J, Takasumi Y, Thomas JP, Wong YL, Findling JW. Chemotherapy-induced regression of an adrenocorticotropin-secreting pituitary carcinoma accompanied by secondary adrenal insufficiency. *Case Rep Endocrinol*. 2013;2013:675298. PMID: PMC3881387
18. Raff H, Carroll T. Cushing's syndrome: from physiological principles to diagnosis and clinical care. *J Physiol*. 2015 Feb 01;593(3):493-506. PMID: PMC4324701
19. Javorsky BR, Carroll TB, Tritos NA, Salvatori R, Heaney AP, Fleseriu M, Biller BM, Findling JW. Discovery of Cushing's Syndrome After Bariatric Surgery: Multicenter Series of 16 Patients. *Obes Surg*. 2015 Dec;25(12):2306-13.
20. Ortiz DI, Findling JW, Carroll TB, Javorsky BR, Carr AA, Evans DB, Yen TW, Wang TS. Cosyntropin stimulation testing on postoperative day 1 allows for selective glucocorticoid replacement therapy after adrenalectomy for hypercortisolism: Results of a novel, multidisciplinary institutional protocol. *Surgery*. 2016 Jan;159(1):259-65.
21. Lai V, Yen TW, Doffek K, Carr AA, Carroll TB, Fareau GG, Evans DB, Wang TS. Delayed Calcium Normalization After Presumed Curative Parathyroidectomy is Not Associated with the Development of Persistent or Recurrent Primary Hyperparathyroidism. *Ann Surg Oncol*. 2016 Jul;23(7):2310-4.
22. Surani A, Carroll TB, Javorsky BR, Raff H, Findling JW. Alcohol-induced Cushing syndrome: report of eight cases and review of the literature. *Front Endocrinol (Lausanne)*. 2023;14:1199091. PMID: PMC10319132
23. Jacquart A, Schilter KF, Udani R, Evans D, Carroll TB, Reddi HV. Constitutional mosaicism for a pathogenic variant in MEN1 associated with multiple endocrine neoplasia type I syndrome. *Clin Genet*. 2023 Jul;104(1):139-141.
24. Carroll TB, Fisco AJ, Auchus RJ, Kennedy L, Findling JW. Paradoxical Results after Inadvertent Use of Cosyntropin [Adrenocorticotropin Hormone (1-24)] Rather than Acthrel (Ovine Corticotropin Releasing Hormone) during Inferior Petrosal Sinus Sampling. *Endocr Pract*. 2014 Jul;20(7):646-9.
25. Ortiz DI, Findling JW, Carroll TB, Javorsky BR, Carr AA, Evans DB, Yen TW, Wang TS. Response to comments on: Cosyntropin stimulation testing on postoperative day 1 allows for selective glucocorticoid replacement therapy following adrenalectomy for hypercortisolism: Results of a novel, multidisciplinary institutional protocol. *Surgery*. 2016 Jul;160(1):249-250.
26. Gloe S, Carroll TB. Hormonal Contraceptive Use Is Associated With a Decreased Incidence of Hypothyroidism *Endocrine Practice*. 2023.
27. Gloe S, Carroll TB. Hormonal Contraceptive Use Is Associated With a Decreased Incidence of Hypothyroidism. *Endocr Pract*. 2024 Jan;30(1):36-40.

Books, Chapters, and Reviews

1. Carroll T (2008) Thyroid Disease, In (Ed.) Torre D, Lamb G, Van Ruiswyk J, Schapira R, Kochar's Clinical Medicine for Students. (401-412). Philadelphia: Lippincott Williams & Wilkins.
2. Carroll T (2008) Disease of the Anterior Pituitary. In (Ed.) Torre D, Lamb G, Van Ruiswyk J, Schapira R, Kochar's Clinical Medicine for Students. (413-420). Philadelphia: Lippincott Williams & Wilkins.
3. Carroll T (2008) Disease of the Posterior Pituitary, In (Ed.) Torre D, Lamb G, Van Ruiswyk J, Schapira R, Kochar's Clinical Medicine for Students. (421-429). Philadelphia: Lippincott Williams & Wilkins.

Peer Reviewed Educational Products

1. Carroll T, Findling JW. Cushing's syndrome. *BMJ Point of Care physician reference tool*.