### **Curriculum Vitae**

Daniel R. Tilden

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**Email:** Daniel.R.Tilden@vumc.org

**Office Phone:** (615) 875-3267 Date of Birth: 7/10/1986

Place of Birth: Kansas City, MO

**Home Address:** 906 Knox Ave.

Nashville, TN 37204

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**Marital Status:** Married, Holly Tilden

**Education:** 

6/2004 - 6/2008**Washington University** 

St. Louis, MO

Bachelor of Arts, Summa Cum Laude Major in Chemistry with a Concentration in Biochemistry, Minor in Educational Studies

Dean's List 2004-08, Phi Beta Kappa

7/2010 - 5/2014Vanderbilt University School of Medicine

Nashville, TN

Doctor of Medicine 5/2014, Member of AOA Certifications: ACLS, PALS, NRP

7/2014 - 7/2018**Resident Physician – Internal Medicine/Pediatrics** 

Nashville, TN

Vanderbilt University Hospital, Monroe Carroll Jr. Children's Hospital at Vanderbilt & Nashville

**Area Veterans Administration Hospital.** 

Resident physician in Internal Medicine and Pediatrics

7/2018 - Present Clinical Fellow - Adult & Pediatric Endocrinology Nashville, TN

Vanderbilt University Hospital, Monroe Carroll Jr. Children's Hospital at Vanderbilt & Nashville

Area Veterans Administration Hospital.

Clinical fellow in both the departments of Pediatric Endocrinology and the Division of Endocrinology,

Diabetes & Metabolism within the Department of Internal Medicine.

**Licensure and Certification:** 

7/2018 – Present State of Tennessee Board of Medical Examiners

10/2018 - Present American Board of Internal Medicine

12/2019 - Present **American Board of Pediatrics** 

**Training:** 

**Professional Organizations:** 

5/2014 – Present Alpha Omega Alpha

7/2014 - Present **American Academy of Pediatrics** 

3/2018 - Present **Endocrine Society** 

#### **Professional Activities:**

12/2011 - 1/2013

### Vanderbilt University Medical School

Nashville, TN

#### **LCME Student Independent Analysis Committee Member**

This committee designed a school-wide survey, analyzed results and wrote a final report for the LCME in order to help the School of Medicine maintain its accreditation and to increase the quality of the education it provides.

- Wrote and reviewed survey questions for school-wide instrument.
- Performed statistical analysis for use by committee members in their reports.
- Analyzed and synthesized survey results in order to produce four sections of the Vanderbilt Student Independent Analysis report for the 2012 LCME review.

8/2010 - 5/2014

### Vanderbilt University Medical School

Nashville, TN

#### Curriculum Committee (Member 2010-2013, Co-Chair 2013-2014)

The curriculum committee is a group of students, elected in annual elections of the class, that serves as the liaison between academic faculty and students.

- Collected information from our class about student concerns during a block, and presented it to faculty to help improve communication between students and academic faculty.
- Served for two academic years (2010-12) as student representative on the first year curriculum team, which reviewed courses from the prior year to continually improve instruction in the first year.
- Served as student representative to the Foundations of Medical Knowledge working group to implement changes for the first year curriculum in Curriculum 2.0.
- As co-chair, led coordination of student course evaluation, feedback sessions and other forms of student feedback within the medical school. Frequently collaborated with the Dean of Undergraduate Medical education on quality improvement within the curriculum.

3/2016 - 6/2018

### Vanderbilt Children's Hospital

Nashville, TN

#### **Pediatric Resident Advisory Council Member**

The resident advisory council meets monthly and includes member from each year of residency training and serves as a sounding board and forum for discussion of curricular changes in the pediatrics residency program

Attend monthly meetings with program directors, chiefs and resident representatives.

5/2017 - Present

### Vanderbilt Children's Hospital

Nashville, TN

#### Improving care at diagnosis for Type I Diabetes

Work with a group, including the Director of the Diabetes clinic, clinic faculty and staff, to attempt to identify areas where care could be improved at or around the time of diagnosis both in and out of the hospital.

- Met with clinic faculty and staff to identify key parameters to collect on each patient
- Reviewed the charts of each of these patients to identify areas for improvement.
- Will work with clinical faculty and staff to develop strategies to optimize care by expediting new
  diabetic teaching and establishing care in our clinic to avoid unnecessary hospitalizations or adverse
  outcomes.

6/2017 - 6/2018

## Vanderbilt University Hospital

Nashville, TN

### **Med-Peds Chief for Quality Improvement**

Collaborate with leadership in the Med-Peds clinic and within the medicine program quality improvement curriculum to identify opportunities for residents to engage in quality improvement at a personal and clinical level and help improve delivery of QI related content within an existing curriculum.

- Meet with Med-Peds program director to identify opportunities for residents to improve their care in clinic through the use of PDSA cycles and the IHI framework for quality improvement.
- Develop quarterly conferences to help residents begin the process of developing a personal and whole group QI project for implementation throughout the academic year.
- Improve Med-Peds resident integration and engagement in didactic QI sessions by collaborating with the leadership of the medicine QI program.
- Assist residents in applying their knowledge of QI in the Med-Peds clinic and throughout the medical center.

### **Teaching Activities:**

### K-12 Teaching

8/2008 - 8/2010

### Teach for America / Weldon STEM High School High School Biology, Chemistry, Physics and Physical Science Teacher

Weldon, NC

Served as member of highly selective national service corps of recent college graduates of all academic majors who commit two years to teach in under-resourced public schools.

- Taught a summer school Biology class while also attending teacher education classes.
- Taught every science class offered, and achieved 51% passing rate in Biology, Physical Science and Chemistry in 2009 and a 95% passing rate in Biology in 2010.
- Collaboratively developed comprehensive Biology, Physical Science, Physics and Chemistry curricula from scratch.
- Served as the Science Department Chair for 2009-2010
- Member of the Scholarship Committee for 2009-2010
- Coached 2009 Boys Varsity Baseball team

1/2012 - 7/2012

#### **LEAD Public Schools**

Nashville, TN

### LEAD Public Schools curriculum design project

Worked with teachers and administrators at a charter public school system to develop a unified 5-12 curriculum for their expanding charter network.

- Worked on a collaborative team of teachers and administrators from all disciplines to develop curricular standards
- Wrote curricular outlines for high school Physics and Chemistry classes within the network.

### Undergraduate Education Teaching Spring 2006

### **Washington University**

St. Louis, MO

### **Undergraduate Genetics Teaching Assistant**

Selected from former undergraduate students to assist faculty in teaching the second semester of the introduction to biology course.

- Attended and assisted with lectures
- Participated in a weekly TA meeting to discuss problem sets
- Lead bi-weekly office hours to answer students' questions.

### Undergraduate Medical Education Teaching 7/2010 – 5/2014

### Vanderbilt Program in Inter-Professional Learning

Nashville, TN

The Vanderbilt Program in Inter-Professional Learning (VPIL) is a program created during the 2010-11 school year that brings together students from VUSM, VUSN, Belmont and Lipscomb Pharmacy schools and TSU School of Social Work in an effort to pursue a new path of interdisciplinary learning. 1<sup>st</sup> and 2<sup>nd</sup> year students work together during both classroom activities and during weekly clinical experiences while students farther along in their courses of study teach and mentor students in their clinic sites and are involved in further shaping the program direction.

- Member of the inaugural class for VPIL
- Worked as a team member at the Vanderbilt Comprehensive Care Clinic with VUSN, Belmont Pharmacy and TSU social work students and helped teach physical exam and interview skills to team members.
- Mentored students in the 3<sup>rd</sup> and 4<sup>th</sup> years of the program in clinical interactions.
- Worked as a team member alongside architects from the Gould Turner Group to create a clinic design for empty space at the 100 Oaks Medical Mall.

7/2015 - 7/2016

### Vanderbilt Children's Hospital

Nashville, TN

#### **Pediatrics Residents as Teachers Longitudinal Elective**

Residents as Teachers Longitudinal elective is a self-selected group of 6-8 residents aimed at helping residents improve their teaching skills by being immersed in medical education experiences through study of medical education literature and direct teaching of medical students and residents in lectures and bedside teaching.

- Participated in monthly, hour-long discussions about book chapters and medical education literature.
- 8/2015 Evaluated and provided feedback for 10 medical students about their 45-minute taped simulated patient encounters.
- 9/2016 Created and presented an hour-long medical student lecture about pediatric chest radiology.

8/2016 - 6/2018

## Vanderbilt University Hospital

Nashville, TN

### **Medicine Resident Teaching Academy**

Resident Teaching Academy is a self-selected group of medicine residents who are seeking to improve their teaching skills. Participants are mentored by selected medicine faculty and give "chalk-talk" style presentations to students on the medicine clerkship in addition to presentations at morning report at Vanderbilt Hospital and other opportunities to hone their education skills.

• 8/2015-5/2016 – Mentored undergraduate students interested in medicine by allowing them to

- shadow for a half-day on multiple occasions over the academic year.
- 5/2016, 11/2016 Observed and provided feedback for 4 half-hour long medical student simulated patient interactions.
- 9/2016 (twice), 2/2017, 4/2017 Designed and presented an hour-long "chalk-talk" about EKGs or antibiotic selection to a group of 10 medical students as a part of their medicine clerkship lecture
- 10/2016 Gave 45-minute presentation to 30 residents at medicine ambulatory morning report about DMARDs available for treatment of RA.
- 4/2017 Gave 45-minute presentation to 30 residents at medicine ambulatory morning report about high risk medications in pregnancy.

### Graduate Medical Education **Teaching**

### Vanderbilt Children's Hospital **Pediatrics Morning Report Presenter**

Nashville, TN

Morning conference occurring once weekly, attended by 20-30 residents, chief residents and program director. Presentations are half-hour long and created by the presenter on a topic of their choice.

- 10/2015 The effect of rotavirus vaccination on rates of adult diarrheal illness
- 4/2017 Advances in the treatment and prevention of atopic disease in children

### Vanderbilt University Hospital

Nashville, TN

#### **Internal Medicine Morning Report Presenter**

Morning conference occurring three times weekly, attended by 20 medical students, 20 residents, the inpatient chief resident, program directors and chief of medicine. Presentations are 15-20 minutes long and created by the presenter on a topic of their choice.

- 7/2015 Screening for cancer in patients with unprovoked DVT
- 8/2015 Treating community acquired pneumonia
- 2/2016 Combined Angiotensin-Neprilysin inhibition for the treatment of CHF
- 2/2017 PSCK9 inhibition in the treatment of hyperlipidemia

## Vanderbilt University Hospital

Nashville, TN

#### Med-Peds Noon Conference Presenter

Noon conference occurring weekly, attended by 20 residents and 10-20 program faculty. Presentations are one hour long and created by the presenter on a topic of their choice.

- 9/2015 Antibiotic decision-making in the treatment of pneumonia in adults and children
- 8/2016 Review of guidelines and decision tools for workup of febrile neonates.
- 4/2017 A physician's guide to helping families navigate the intersection between schools and the health-care system

## Vanderbilt University Hospital

Nashville, TN

### **Endocrinology Grand Rounds Presenter**

Morning conference occurring weekly, attended by 15-25 division faculty. Presentations are one hour long and created by the presenter on a topic of their choice.

- 10/2019 Morbidity, Mortality and Improvement Thyroid Storm
- 11/2019 A1c is Dead! Long Live A1c!: Pitfalls and Future Directions for Glycemic Monitoring

### Vanderbilt University Hospital **Resident Academic Half Day Presenter**

Nashville, TN

4-hour session with various presenters on one topic. Attended by residents and interns on their clinic block, attended by approximately 40 residents.

11/2019, 12/2019 – Osteoporosis for Primary Care Providers

#### **Research Activities:**

11/2010 - 4/2012

### Vanderbilt University Medical School, Dr. Thomas Cook **LEAD High School Nutrition and Food Access Project**

Nashville, TN

This project was designed in conjunction with the administration of LEAD Academy, a charter high school in the Nashville community that primarily serves students from low socioeconomic status. We sought to understand factors that might contribute to increasing students' intake of fruits and vegetables.

- Collaborated with school faculty, administration, and other interested stakeholders to construct and administer a survey to assess student food intake and attitudes toward school lunch.
- Submitted grants to local and national organizations for funding of a salad bar for school cafeteria.
- Performed statistical analysis on results and synthesized data to produce poster for emphasis forum.
- Volunteered at the school to help with various school activities including student-led conferences and after school tutoring.

1/2013 - 5/2014

### Vanderbilt University Medical School, Dr. Ken Monahan Genetic Contribution to Atrial Fibrillation in Obstructive Sleep Apnea

Nashville, TN

This project worked to correlate clinical severity of sleep apnea, echocardiographic changes and genetic contributions in order to help develop a clinically useful model to predict the risk of atrial fibrillation in an at-risk population

- Performed chart review for a data set of approximately 1400 individuals
- Collaborate with other team members to verify data quality.

#### 12/2015 - Present

# Vanderbilt University Medical Center, Dr. Kathryn Dahir Refining the Clinical Phenotype of Hypophosphatasia Nashville, TN

This project uses both GWAS and PheWAS approaches to leverage a de-identified medical record with linked genetic mapping to identify novel genotypic and phenotypic associations with patients with low serum alkaline phosphatase.

- Perform manual chart review of patient records to further define phenotypic correlations after initial PheWAS screen.
- Collaborate in the production of an abstract and original manuscript describing our findings.

#### 12/2018 - 6/2019

### Vanderbilt University Medical Center, Dr. Sarah Jaser Community Engagement Studio – Transitions in Type 1 Diabetes

Nashville, TN

This project used the community engaged research core to recruit a small group of patients with T1D to help guide the development of planned focus groups. The goal of these focus groups will be to better understand the shortcomings of our current system to transition between pediatric and adult care and engage patients in developing improvement in this system moving forward.

- Independently conceived the study and wrote grant proposal which was fully funded by VICTR (VR53049) – \$500.
- Interacted with community engaged research core staff to help with recruitment and in development of questions for the studio session.
- Currently using the data from this session to help guide development of focus groups on this topic.

#### 2/2019 - Present

## Vanderbilt University Medical Center, Dr. Ashley Shoemaker Nashville, TN Correlating the Pediatric to Adult transition to rising A1c among patients with Type 1 Diabetes

This project uses a de-identified medical record with automated case finding to identify patients who have completed pediatric to adult care transition within a single health system to identify longitudinal trends in A1c, clinic visits and other clinical factors across this care transition.

- Independently conceived the study, wrote IRB which was approved 2/2019 (IRB#182241)
- Funded by VICTR (VR53049) \$7,969 for biostatistics and programming support
- Continue to interact with informatics and biostatistics staff to ensure appropriate data collection and analysis.
- Currently drafting manuscript for publication as well as a poster for presentation at a national meeting.

#### **Presentations and Publications**

4/2012 **Emphasis: Forum VII** 

Nashville, TN

Poster Presentation: **Involving underserved students in healthy food choices** *Tilden DR*, *Cook TH* 

4/2017 **Vand** 

#### Vanderbilt GME Research Forum

Nashville, TN

Poster Presentation: Nine rare variants in the tissue-nonspecific alkaline phosphatase (TNSALP) gene: Refining the phenotype of hypophosphatasia.

Tilden DR, Simmons JH, Smith DK, Newman JH, Dahir KM

### 3/2018 ENDO 2018 – Annual Meeting of the Endocrine Society

Chicago, IL

Poster Presentation: Nine rare variants in the tissue-nonspecific alkaline phosphatase (TNSALP) gene: Refining the phenotype of hypophosphatasia.

Tilden DR, Simmons JH, Smith DK, Newman JH, Dahir KM

**ENDO 2018 – Annual Meeting of the Endocrine Society** 

### 3/2018

Chicago, IL

Poster Presentation: Rare Variants in the ALPL Gene Are Highly Associated with Ovarian and

Uterine Disorders.

Dahir KM, <u>Tilden DR</u>, Smith DK, Simmons JH, Newman JH

6/2018 Journal of Clinical Endocrinology and Metabolism

Research Article: Rare variants in the gene ALPL that cause hypophosphatasia are strongly

associated with ovarian and uterine disorders.

Dahir KM, Tilden DR, Warner JL, Bastarache L, Smith DK, Gifford A, Ramirez AH, Simmons J, Black MM, Newman JH, Denny JC.

3/2019 **ENDO 2019 – Annual Meeting of the Endocrine Society** 

**New Orleans. LA** 

Poster Presentation: The Clinical Utility of Gene Sequencing in Hypophosphatasia: Lessons from

Patients with Two Rare Variants.

Tilden DR, Sheehan JS, Newman JH, Meiler J, Capra JA, Simmons JS, Black MM, Dahir KM

6/2020 **Journal of the Endocrine Society** 

Research Article in press: Phenotypic Profiling in Subjects Heterozygous for One of Two Rare

Variants in the Hypophosphatasia Gene (ALPL).

Tilden DR, Sheehan JS, Newman JH, Meiler J, Capra T, Ramirez AH, Simmons JS, Black MM, Dahir

KM

#### **Academic Honors**

4/2007 - 9/2007

#### **Washington University in St. Louis**

St. Louis, MO

**Howard Hughes Medical Institute Summer Research Fellow** 

Applied to and received a competitive fellowship award which provided funding to pursue mentored research over the summer between Junior and Senior year in college. Working under the direction of Dr. Thomas Morgan, I was a part of a team investigating the correlation between preterm birth and copy number variants at multiple candidate loci using a SNP array.

5/2011 - 8/2011

### Vanderbilt University Medical School

Nashville, TN

**Amos Christie Summer Scholarship** 

This program provides competitive scholarships for students during the summer between their 1st and 2nd years in medical school to allow them to participate in a six-week summer program to gain clinical experience in pediatrics.

5/2014

#### Vanderbilt University Medical School

Nashville, TN

Geoffrey David Chazen Award

Given to a medical student for contributions to the educational program of Vanderbilt University Medical School through the development and implementation of effective innovation in medical education.

3/2018

### **ENDO 2018 – Annual Meeting of the Endocrine Society**

Chicago, IL

**Presidential Poster Competition Winner** 

Selected for the competition based on my abstract submission to give an oral presentation of my work and to discuss with expert judges from the field. Was selected the winner out of 6 residents, fellows and early career faculty selected to give presentations.

3/2019

## **ENDO 2019 – Annual Meeting of the Endocrine Society**

New Orleans, LA

**Presidential Poster Competition Winner** 

Selected for the competition based on my abstract submission to give an oral presentation of my work and to discuss with expert judges from the field. Was selected the winner out of 6 residents, fellows and early career faculty selected to give presentations.

3/2019

#### **ENDO 2019 – Type 1 Diabetes Pre-Conference Awardee** New Orleans, LA

Selected for the pre-conference based on competitive application to participate in a 3-day pre-conference session. Selection also included travel, hotel and conference registration expenses.