

## Vanderbilt University SPIE Student Chapter Annual Report: 2018

### 1. Chapter officers

	Name	SPIE Membership #	Email
President	Jen Bateman	4006981	Jennifer.n.bateman@vanderbilt.edu
Vice-President	Graham Throckmorton	3710439	Graham.a.throckmorton@vanderbilt.edu
Treasurer	Emmanuel Mannoh	3711317	Emmanuel.mannoh@vanderbilt.edu
Secretary	Eric Tang	4166439	Eric.m.tang@vanderbilt.edu

### 2. List of current student chapter members

Alec Walter  
Emmanuel Mannoh  
Eric Tang  
Graham Throckmorton  
Jen Bateman  
Jeremy Ford  
Joe Malone  
Laura Masson  
Logan Jenkins  
Mohit Ganguly  
Mohamed El-Haddad  
Rekha Gautam  
Shuang Chang  
Wilson Adams  
Andrea Locke  
Andrew Plassard  
Giju Thomas  
Sean Fitzgerald  
Shunxing Bao

### 3. Details of chapter activities since last report

This was a busy year full of professional development and outreach events. We continued our optics and photonics seminar series and had a great set of speakers (listed below), both external and internal to Vanderbilt. They highlighted their exciting research during formal presentations open to all researchers at Vanderbilt, and also discussed the problems they face in their research. As a part of hosting visiting speakers, we continued with our informal SPIE student chapter coffee hour sessions where students and postdocs had an opportunity to ask the speakers questions about their careers, the reasoning behind each speaker's career choices, and sought insights on potential career paths that current graduate students and postdocs in optics and photonics can consider. Here is a list of the speakers from our Vanderbilt University Biophotonics Seminar Series during Fall 2017-Spring 2018.

### Fall 2017

<b>Speaker</b>	<b>Affiliation</b>	<b>Attendance</b>
Anthony Daniels	Vanderbilt University	28
Jeff Brooker	Thorlabs	34
Sunney Xie	Harvard	42
Peter So	MIT	40
Joseph Izatt and Cynthia Toth	Duke University	30
Bruce Tromberg	University of California, Irvine	30

### Spring 2018

<b>Speaker</b>	<b>Affiliation</b>	<b>Attendance</b>
Sandra Rosenthal	Vanderbilt University	56
Bryan Millis	Vanderbilt University	54
Thomas Wang	University of Michigan	36
Robert V. Chimenti	Innovative Photonic Solutions (IPS)	23
Mingfeng Bai	Vanderbilt University	47
Andrew Berger	University of Rochester	29
Arthur Gmitro	University of Arizona	28
Martin Leahy	National University of Ireland, Galway	34
Brian Pogue	Dartmouth College	59

Apart from the seminar series and the corresponding coffee hour sessions, we continued with our tradition of holding weekly meetings with student members and professors to discuss research and chapter activities. Our group continues to be active in mentoring high school level and undergraduate students to perform independent research. We have continued to hold weekly student journal clubs where we discuss the latest research topics in the field of optics and photonics, not necessarily within the scope of research. This gives us an opportunity to discover other applications of light; inside or outside of biophotonics. Apart from research, we organize the biweekly "fluids labs" where the students socialize and share their research ideas in a relaxed atmosphere.

We have continued the semimonthly photonics education outreach events at a local high school (Glencrif High School, Nashville). Student groups that are under-represented in the field of optics are exposed to various outreach activities. In addition, we visited the local 4-H club and taught middle school students about optics and their biomedical applications. We also opened our lab up to 20 high school students interested in STEM to expose them to the research in optics.

SPIE Members with the local 4-H club



#### 4. Details of planned activities for the future

We plan to continue our excellent seminar series. A tentative list of expected series speakers for the fall of 2018 is as follows:

<b>Speaker</b>	<b>Affiliation</b>
Andries Zijlstra	Vanderbilt University
Jason Valentine	Vanderbilt University
Ton van Leeuwen	University of Amsterdam Academic Medical Center
Alex Walsh	Morgridge Institute for Research
Christine Hendon	Columbia University
Nicholas Stone	University of Exeter
Wolfgang Drexler	Medical University of Vienna
Jana Kainerstorfer	Carnegie Mellon University

In addition to the seminar series, we will continue with the journal clubs, "fluids labs", coffee hours, and the weekly meetings. We will also begin holding monthly SPIE General Body Meetings. We plan to hold another "Optics Day" event at the adventure science center in late February 2019, and continue with the outreach events at the local schools.

## 5. Financial Information

- a. Beginning balance - \$1,278.88
- b. Funds raised and expended (indicate amounts and source/destination)  
Funds raised:  
\$1,150.00 – Vanderbilt Student Activity Fee Sponsorship  
Funds expended:  
\$445.63 – Tromberg Seminar  
\$347.63 – So Seminar  
\$162.95 – Xie Seminar  
\$81.94 – SPIE Student Chapter Outreach (Supplies)  
Total: \$1,038.15
- c. Details of SPIE funding received – NA
- d. Other sources (please specify) – Vanderbilt Student Activity Fee Sponsorship for student organizations on campus.
- e. Ending balance - \$1,390.73