STUDENT HANDBOOK

SUMMER UNDERGRADUATE RESEARCH PROGRAM (SURP)

JUNE 1 – AUGUST 7, 2015
OMAHA, NEBRASKA
Dear SURP Student,

We would like to extend a warm UNMC welcome to all of this year’s participants in the Summer Undergraduate Research Program (SURP). SURP at UNMC brings together an extraordinary group of distinguished faculty, clinicians, researchers, and staff to provide a unique ten-week experience for you. Our diverse team of faculty and staff will explore areas of research, provide mentoring, and make sure you get the individual attention necessary for you to excel.

You will have the opportunity for:

- Hands-on laboratory experience with a research team
- Engagement in weekly seminars with topical areas such as health policy and research careers
- Present your own research at a Poster Symposium
- Daily interactions with research faculty, staff, and students
- Friendships that will last a lifetime

We wish you the best as you make final preparation for your arrival in Omaha to participate in SURP 2015.

Channing Bunch, M.B.A.
Director
Recruitment and Student Engagement
Student Life Center
Room 2043
P: 402-559-3809
rse@unmc.edu

Channing Bunch, M.B.A
Director
channing.bunch@unmc.edu

Sherman Petite, M.S.
Graduate Recruiter and Retention Specialist
spetite@unmc.edu

Jennifer Kubila, M.Ed.
Education Specialist
jennifer.kubila@unmc.edu
OMAHA

Omaha is an ethnically and racially diverse community and with a population of over 700,000, it is Nebraska’s largest city. Omaha boasts many other outstanding attractions, including a drive-through Wildlife Safari Park; Henry Doorly Zoo; Strategic Air and Space Museum, a Smithsonian Institute affiliate devoted to U.S. military aircraft, missiles, and science; Boys Town; and the NCAA College World Series.

Omaha is a true cultural center with over 20 museums and fine art centers, including the Joslyn Art Museum; Durham Western Heritage Museum; El Museo Latino; The Rose Theatre; and the Holland Performing Arts Center.

Each summer, Omaha is host to number of concert and theatre series including Jazz on the Green; Omaha Riverfront Jazz and Blues Festival; Summer Arts Festival; Taste of Omaha; and Shakespeare on the Green. The CenturyLink Center is a top venue for touring musicians, national rodeos, and sporting events.

The historical Old Market area and recently developed North Downtown (NoDo) provide many cultural/artistic shopping and dining opportunities. Midtown Crossing and Aksarben Village, are two developing entertainment and shopping hubs.

Welcome to Omaha Video
As Nebraska’s only public academic health sciences center, The University of Nebraska Medical Center is committed to the education of a 21st century health care workforce, to finding cures and treatments for devastating diseases, to providing the best care for patients, and to serving out state and its communities through award-winning outreach.

UNMC is also committed to embracing the richness of diversity. UNMC has developed academic affiliations with historically black colleges and universities, Hispanic-serving colleges and universities, regional tribal colleges, and rural colleges.

UNMC has six colleges and two institutes, serving more than 3,100 students in more than two dozen programs. In 2014, U.S. News & World Report ranked UNMC’s primary care program 4th. The University’s physician assistant, physical therapy, pharmacy, and nursing programs also were ranked as among the top in the country.

The UNMC Summer Undergraduate Research Program is a collaboration between UNMC departments, institutes, colleges, student services, and graduate specialty areas to provide summer opportunities for undergraduate students to become members of research teams and discover first-hand the broad spectrum of research activities occurring at UNMC.

UNMC: Breakthroughs for Life Video
Biochemistry and Molecular Biology Department
The Department of Biochemistry and Molecular Biology offers programs of graduate study leading to the M.S. and Ph.D. degrees. The M.S. program is designed to provide a background in analytical and experimental biochemistry and includes a Master's thesis. The Ph.D. program is designed to provide a more comprehensive knowledge of the biochemistry and molecular biology of living organisms and includes the research and training experience necessary for the development of independent investigators.

Cellular and Integrative Physiology
The mission of the Department of Cellular & Integrative Physiology is to excel in research, teaching, service and mentoring. The primary research strength is in the area of the cardiovascular and renal physiology, but there is also expertise in the areas of reproductive physiology and neural control of cardiopulmonary and renal function. Teaching activities revolve around 12 graduate-level courses. Research training programs are offered for high school and undergraduate students, medical students, graduate students and postdoctoral trainees.

Eppley Institute for Cancer Research
The Eppley Institute for Research in Cancer and Allied Diseases is a multidisciplinary cancer research institute. The mission of the Eppley Institute for Research in Cancer and Allied Diseases is to:

- develop superior research programs that will provide a better understanding of the causes of cancer
- improve the methods for diagnosis of cancer and improve the methods for the treatment and prevention of cancer and similar disorders
- provide outstanding graduate and post-graduate educational opportunities in cancer research
Internal Medicine
The mission of the Department of Internal Medicine is to improve the health of the citizens of Nebraska through nationally recognized programs in clinical care, education of health care providers, and research that enhances the understanding, treatment and/or prevention of disease. Driven by this mission, the department has adopted the following strategic goals:

- provide biomedical educational programs for health care providers and researchers that are recognized as excellent at the college, state, and national levels
- expand and develop national recognition for our clinical, translational and basic biomedical research programs and educational scholarship
- provide clinical care that is recognized both regionally and nationally for innovation and effectiveness

MD/PhD Scholars Program
The MD/PhD Scholars Program is designed to prepare a select group of outstanding students for careers in academic medicine and research. Applicants admitted to this highly competitive program pursue original research and participate in the medical school curriculum. The integrated training for both degrees allows compression of the total academic effort as some course work can be applied to both degrees. By continually reinforcing the interaction between biomedical research and clinical medicine, this integration prepares the student for a unique role as a physician-scientist.

Pathology and Microbiology
The mission is to lead research, education and clinical services at the interface between basic science and medical practice in Pathology, Microbiology, and Immunology. Our vision is a world-class clinical service, innovative research, outstanding educational opportunities in Pathology, Microbiology, and Immunology. The Department of Pathology and Microbiology develops, conveys and applies knowledge to further the science and practice of pathology and microbiology.
Pediatrics
The Department of Pediatrics mission is to advocate for optimal children’s health through outstanding clinical services for children and their families. Pediatrics strives to improve the well-being of all children and offer quality education programs that prepare providers for the future through our student, resident, fellow, and continuing education programs.

Pharmaceutical Sciences
Pioneers in education. Leaders in research. UNMC’s College of Pharmacy develops medicines to treat the world’s most devastating diseases and prepares pharmacists to thrive in the ever-changing world of health care. The Mission of the College of Pharmacy is to improve the health of Nebraska through premier educational programs for pharmacists, other health professionals and post-graduate students, conduct innovative research and provide highest quality patient care and outreach to underserved populations.

Pharmacology and Experimental Neuroscience
Pharmacology continues to be among the most dynamic of the biomedical sciences. Neuroscience research has been a major emphasis of the Department of Pharmacology at UNMC from its earliest days. The Department of Pharmacology and Experimental Neuroscience has grown in number and stature and is truly interdisciplinary. The mission remains to:
• Educate the next generation of health care providers
• Perform on the cutting edge of science
• Serve the people of our state and those worldwide

Radiation Oncology
The Department of Radiation Oncology is dedicated to providing a comprehensive scope of practice in the areas of patient care, education and research for the benefit of our patients, physicians and all who are in need of radiation oncology services. The vision of the Radiation Oncology Department is to be the leader in clinical patient care by employing the latest advances in technology and innovative treatment techniques. The desired results that we would be striving for are improvements in patient outcomes.
College of Nursing
The mission of the College of Nursing is to improve the health of Nebraska through premier nursing education programs, innovative research, the highest quality patient care, and service to underserved populations. The Vision of the College of Nursing is to be a vital part of a world-renowned health sciences center and to:
- Deliver state of the art nursing education blending traditional learning approaches with emerging learning technologies;
- Offer health care and health systems solutions grounded in leading-edge nursing science;
- Promote health, reduce the burden of illness, and lessen health disparities in Nebraska and beyond.

College of Public Health
The mission of the College of Public Health is to promote optimal health and well-being through robust education, research, and service in collaboration with communities in Nebraska, across the country, and around the world. The College of Public Health will be a place of innovation, growth and excellence, to foster sustainably healthy populations and environments.

School of Allied Health Professions
Allied health professionals comprise approximately 60 percent of the total health care workforce and, together, provide the fundamental framework critical to the success of the American health care system. SAHP is steadfastly committed to its historic mission of educating allied health professionals, as well as collaboratively exploring research questions that improve the delivery of care and promote health. The mission of the SAHP is to improve the health of Nebraska by:
- Delivering allied health educational programs that prepare graduates to provide high quality, evidence-based, safe care for all patients;
- Conducting scholarly activities that create and disseminate knowledge reflective of the unique contributions of allied health theory and practice;
- Providing high quality, contemporary clinical care in the allied health disciplines; and
- Providing outreach to underserved populations.
ARRIVAL

Travel Process

Driving
If you are driving to Omaha and staying at Clarkson College, the address is below. Please show up before 10:00pm on Sunday May 31, 2015.

Clarkson College
104 S. 42 Street
#1
Omaha, NE 68131
Phone: 402-991-4825
Flying
- If you are flying, you’ll need to fly into OMA, Omaha Eppley Airfield. [http://www.flyoma.com/](http://www.flyoma.com/)
- Once you arrive at OMA, you will need to take transportation to Clarkson College. Please show up before 10:00pm on Sunday May 31, 2015. Below is a list of ground transportation options. See address above.

Shuttles
- The Ground Transportation Center is located inside of Door #3 on the lower level of the terminal building. Certain shuttles have phones there. Local hotel/motel (with or without shuttles) phone boards/reservation centers are located near the north and south baggage claim areas.
  - **Dashabout Roadrunner**: Greater Nebraska - 800-720-3274
  - **OMALINK**: Van shuttles and town cars serving Nebraska and Iowa - 877-473-5465

Taxis
- **Happy Cab**: 402-333-TAXI (8294)
- **Checker Cab**: 402-333-TAXI (8294)
- **Yellow Cab**: 402-333-TAXI (8294)
- **Safeway Cab**: 402-333-TAXI (8294)
- **City Taxi**: 402-933-8700
Clarkson College will provide SURP students convenient, comfortable, unique living and learning experience. The Student Village is a four bedroom apartment-style suite. The residence hall is conveniently located right across from the main campus of UNMC. To secure housing, please contact Clarkson College and tell them you are from UNMC’s SURP program. It will be the responsibility of each student (unless otherwise stated by the department) to select their housing of choice, sign a contract, coordinate accommodations and facilitate payment. Students are responsible for payment of their housing unless otherwise stated by the department.

The new facility for on-campus living includes:
- Controlled access
- 24-hour staff
- Laundry facility

Typical Floor Plan & Amenities:
- Furnished bedrooms and living rooms
- Private bathrooms with double vanities
- Spacious, fully equipped kitchen
- Dining/study counter
- Cable hookups
- Internet availability in each bedroom

**Contact:** Student Housing Office
Clarkson College
104 S. 42 Street #1
Omaha, NE 68131
P: (402) 991-4825 or 800-647-5500
housing@clarksoncollege.edu

For more information visit:
http://www.clarksoncollege.edu/student-life/residence-life/
Check-In
If you are staying at Clarkson College, upon arrival in Omaha, you will check in at the residence hall, located at 104 S. 42 Street #1 Omaha, NE 68131. When you check in, you will confirm your housing accommodations; receive your room assignment, a key to your apartment, room, and a mailbox for your use during your stay.

What to Bring
- Shower curtain
- Alarm Clock
- Bank card (deposits and cash)
- Toiletries (soap, shampoo, deodorant, etc.)
- Shower shoes- flip flops
- Shower caddy
- Robe/ pajamas/ lounge wear
- Notebook paper, pens, pencils, etc.
- Clinical ward attire (slacks/skirts, shirts/blouses)
- Reception attire (tie, dress/slacks, skirt, suit/jacket)
- Rainwear and umbrella
- Comfortable business casual clothes
- Tennis Shoes/ comfortable walking shoes
- Flashlight with batteries
- Light jacket or sweater
- Light blanket
- Medications

Nebraska Weather
Nebraska’s summer weather can be unpredictable. The summers are hot and humid, but the weather may vary during the duration of the program. The residence hall is air conditioned and it is recommended that you bring a blanket for the cooler nights. Bring a light jacket or sweater for the lecture hall and classrooms. Nebraska often has rain and severe thunderstorms. Please bring rain gear - jacket/umbrella, as well as a flashlight for your dormitory room.

Parking
To park at UNMC you’ll need to pay $15/month. Once you have your UNMC I.D. badge, you can visit Parking Services located in the Student Center, second floor in the Bookstore. Hours of operation: Monday – Thursday: 7:30am – 4:30pm, Friday: 7:30am – 4:00pm.
Student Health Services
SURP students are required to provide their own health insurance. SURP students are not considered UNMC students through Student Health. If you would like to be seen at the clinic, you'll need to go in as a regular patient. If no appointments are available for the day, you'll be referred to the ER if necessary. Photo ID is required for appointments. If you need prescription refills while you are here, please fax all requests to (402) 559-5550.

Appointments: (402) 559-7200
Hours: M-F 8:00am - 4:30pm
Saturday: 8:00am-12:00pm (Urgent Care Only)
Location: Durham Outpatient Center, Level 3

For more information, including prices visit their website at www.studentinsurance.com

Gym
Center for Healthy Living, located in the Student Life Center, is a multi-purpose facility that offers fitness, recreation, leisure and wellness opportunities.

Cost: $28.00 per month

Banking
Metro Credit Union, adjacent to UNMC, provides free check-cashing services to SURP. Other banks near the UNMC and Clarkson Campuses are:
- Bank of the West
- First National Bank
- Security National Bank
- US Bank
- Wells Fargo Financial Bank

Faith Opportunities
There are several areas of worship within walking distance of Clarkson College and UNMC. Let us know if you are interested and we will connect you.
### Supermarkets
Baker's Supermarkets  
888 S. Saddle Creek Rd.  
Omaha, NE 68106  
(402) 551-0613

Walmart Neighborhood Store  
360 N. Saddle Creek Rd.  
Omaha, NE 68131  
(402) 970-6491

### Pharmacies
Walgreens  
225 N. Saddle Creek Rd  
Omaha, NE 68131  
(402) 551-1797

CVS Pharmacy  
4812 Dodge St.  
Omaha, NE 68132  
(402) 558-2000

### Coffee Shop
Casa Blanca Cafe  
3025 Farnam St.  
Omaha, NE 68131  
(402) 884-3788

Sambuza Café  
2425 Douglas St. Ste 8  
Omaha, NE 68131  
(402) 346-6840

### Carryout/Delivery
Jimmy John's  
107 N 40th St  
Omaha, NE 68131  
(402) 614-4545

Godfather's Pizza  
2951 Farnam St.  
Omaha, NE 68131  
(402) 341-5353

### Fast Food Restaurants
Wendy's  
4308 Dodge St.  
Omaha, NE 68131  
(402) 558-1111

McDonald's  
122 S 40th St.  
Omaha, NE 68131  
(402) 558-3300

Subway  
4020 Dodge St.  
Omaha, NE 68131  
(402) 551-1081

KFC  
4358 Dodge St.  
Omaha, NE 68131  
(402) 504-3474

### Banks
Metro Credit Union  
414 S. Saddle Creek Rd.  
Omaha, NE 68131  
(402) 551-3052

Bank of the West  
4444 Farnam St.  
Omaha, NE 68131  
(402) 918-5690

U.S. Bank  
520 N Saddle Creek Rd.  
Omaha, NE 68131  
(800) 872-2657

### Movie Theaters
Marcus Midtown Theatre  
3201 Farnam St.  
Omaha, NE 68131  
(402) 346-6900
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>Orientation</td>
<td>June 1, 2015</td>
<td>10:00AM - 4:30PM</td>
<td>Durham Research Center Auditorium</td>
<td>Mr. Channing Bunch</td>
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<tr>
<td>Tuesday Lunch</td>
<td>June 9, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>Wittson Hall 3034</td>
<td>Ms. Brenda Nikol “Professional Communication”</td>
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<td>Tuesday Lunch</td>
<td>June 16, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>Eppley Science Hall 3010</td>
<td>Dr. Philip Smith “Ebola”</td>
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<tr>
<td>Tuesday Lunch</td>
<td>June 23, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>Eppley Science Hall 3010</td>
<td>Dr. Jennifer Larsen “Research at UNMC”</td>
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<td>Tuesday Lunch</td>
<td>June 30, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>Eppley Science Hall 3010</td>
<td>Dr. Joyce Solheim “Cancer Biology”</td>
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<td>Tuesday Lunch</td>
<td>July 7, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>Eppley Science Hall 3010</td>
<td>Dr. Chris Kratochvil “ADHD/Depression in Children”</td>
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<td>Tuesday Lunch</td>
<td>July 14, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>Wittson Hall 3034</td>
<td>Ms. Heather Talbott “USDA Grant”</td>
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<td>Tuesday Lunch</td>
<td>July 21, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>Eppley Science Hall 3010</td>
<td>Ms. Robin Taylor “Poster Pres. UNMC Branding”</td>
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<td>Tuesday Lunch</td>
<td>July 28, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>Eppley Science Hall 3010</td>
<td>“Internal Medicine Panel”</td>
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<td>Event</td>
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<tr>
<td>College World Series</td>
<td>June 13, 2015</td>
<td>2:00PM - 5:00PM</td>
<td>Hilton Hotel</td>
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<td>Biocontainment Unit Tour</td>
<td>June 19, 2015</td>
<td>9:00AM - 1:00PM</td>
<td>University Tower, 7th Flr</td>
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<td>College of Public Health Admission Talk</td>
<td>June 18, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>College of Public Health</td>
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<td></td>
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<td>Jessica Tschirren, M.P.A.</td>
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<td>Bowling</td>
<td>June 19, 2015</td>
<td>6:00PM - 8:00PM</td>
<td>Maplewood Lanes</td>
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<tr>
<td>College of Allied Health Admission Talk</td>
<td>June 24, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>DRC II</td>
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<td></td>
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<td>Tamara Cardin</td>
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<td>College of Medicine Admission Talk</td>
<td>June 25, 2015</td>
<td>12:00PM - 1:00PM</td>
<td>College of Public Health</td>
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<td>Gigi Rogers</td>
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<tr>
<td>College of Pharmacy Admissions Talk</td>
<td>July 1, 2015</td>
<td>12:00PM – 1:00PM</td>
<td>College of Public Health</td>
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<td>Chris Shaffer, Pharm.D.</td>
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<td>Medical Simulation Lab Tour</td>
<td>July 13, 2015</td>
<td>9:00AM - 10:00AM</td>
<td>Sorrell Center 1039</td>
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<td></td>
<td>July 16, 2015</td>
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<td>July 17, 2015</td>
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<tr>
<td>Poster Symposium</td>
<td>August 6, 2015</td>
<td>10:00AM - 12:30PM</td>
<td>Sorrell Center Truhlsen Events Center</td>
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<tr>
<td>Closing Banquet</td>
<td>August 6, 2015</td>
<td>1:00PM - 2:30PM</td>
<td>Storz Pavilion</td>
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ADVICE

Recruitment and Student Engagement asked previous scholars to give advice to new SURP students. Please read their responses below.

**What advice do you have for this year’s participants?**

**Kim:** Come in ready to work and learn from both peers and mentors! You reap the rewards of what you sow -- if you want a fulfilling research experience, be prepared to make the most of your hours in the lab! Cultivate relationships with peers and make the most out of your summer!

**Holland:** Take time to reflect on the many learning opportunities and to develop professional relationships with the helpful staff members and personal relationships with the other SURP students. Be sure to ask questions, the expert staff is an excellent resource as you grow as research student.

**What was it like meeting the other undergraduate researchers?**

**Kim:** “I had the opportunity to live in the Clarkson Apartment dorm with 3 other undergrad researchers from across the country. After coming back from our respective research departments, we were able to share what happened through our day and hang out together. In our leisure times and on weekends, we traveled around Nebraska, hung out at the College World Series, went shopping, explored the Omaha Zoo, and played basketball (it was always fun watching the NBA Finals together as we all rooted for different teams).”

**Tyler:** “I appreciated the times we were allowed to come together with our fellow undergraduate researchers. It was encouraging to see fellow students with a passion to pursue their career goals and hear their stories and future aspirations.”
What was the highlight during your time here?

Kim: “Some highlights while participating in SURP include meeting people from across the country and having the opportunity to work on a fantastic project. I also had fun staying up late with some friends working on our respective posters (for the poster presentations). In terms of highlights within the lab, I was floored when I had the opportunity to experience immunofluorescence.

Tyler: “There were many highlights during the summer, but I think the most important and influential times of my internship experience were when I was able to converse with Dr. Turman. I learned much in regards to research methods, epidemiology in general, physical therapy, and just the life experiences of my colleagues. Much can be learned from people in a well-experienced position. To be in a lab researching is great, but other things can also be learned by just talking to people who have great experiences to share.”

Holland: “Interacting with others while developing my research skills and exploring the many graduate programs available at UNMC were among the highlights of my SURP experience.”

How will this experience stay with you going forward?

Kim: “The lab experience I took from SURP has helped me in my cellular biochemistry lecture and lab. Furthermore, I am sure that my lab experience will help me be a well-rounded individual as I apply to medical school this upcoming year!”

Tyler: “I will take the knowledge and wisdom that I learned from my experience, from both the research and interactions within my group.”

Holland: “The SURP experience helped me develop background knowledge related to internal medicine that was applicable to my current studies. It also sparked my interest in continuing my education in a health care related field.”