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**DePaul University**  
**College of Science and Health**  
**Annual Report Contents**

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Soon after arriving in late June of 2013, I found myself amazed by the welcoming climate at the College and the many accomplishments of the faculty and staff that had taken place under the leadership of Interim Dean Jerry Cleland. As the newest academic unit of DePaul, all components of the College faced challenges of continuity, cohesion, and innovation. We forged a new growth model of the College, completed articulation and collaboration agreements in our alliance with Rosalind Franklin University of Medicine Science, and continued to grow. Associate Dean Mona Shattell’s idea of an annual report as a way to showcase our accomplishments has now borne fruit. The report you have in front of you does an excellent job of recognizing our highly productive faculty, hard-working staff, and outstanding advising team, all of whom collaborate effectively to provide an outstanding educational environment. I expect that the College will soon become widely known as a high value destination for undergraduates and graduate students aspiring to productive careers in mathematics, the natural sciences, and the health professions.

Not bad for a two-year-old!

Best,

Gerry Koocher
In 2011, nine of DePaul University’s broad and nationally recognized science and math programs networked under a new grouping—the College of Science and Health. The merger allows departments to maintain the caliber of each autonomous program while enjoying the benefits of greater integration between sciences, mathematics, and health studies. The following departments, centers, schools, and institutes comprise DePaul’s newest college:

- **Biological Sciences**
  - CHAIR John Dean, PhD

- **Chemistry**
  - CHAIR Lihua Jin, PhD

- **Environmental Science & Studies**
  - CHAIR Judy Bramble, PhD

- **Health Sciences**
  - CHAIR Craig Klugman, PhD

- **Mathematical Sciences**
  - CHAIR Ahmed Zayed, PhD

- **Physics**
  - CHAIR Jesus Pando, PhD

- **Psychology**
  - CHAIR Susan McMahon, PhD

- **School of Nursing**
  - DIRECTOR William Cody, RN, PhD, CNE, FAAN

- **STEM Studies**
  - DIRECTOR Lynn Narasimhan, PhD

- **Quantitative Reasoning Center**
  - DIRECTOR David Jabon, PhD

- **Center for Community Research**
  - DIRECTOR Leonard Jason, PhD

- **Family & Community Services**
  - DIRECTOR Orson Morrison, PsyD

- **Institute for Nature and Culture**
  - DIRECTOR Liam Heneghan, PhD
Advisory Council

The Advisory Council, a volunteer group comprised of alumni and friends of the College, is committed to the goal of educating students within the highest standards. Advisory Council members provide resources for the college, including current insight on working in math, science, and health fields, professional and internship opportunities for students, and support for the College of Science and Health. The Advisory Council exhibits a strong Vincentian commitment to social justice and civic engagement, and long term planning is made exponentially more effective with the members’ knowledge of their respective math, science, and health fields and markets.

Many thanks to the College of Science and Health
Advisory Council Members:

**Patricia G. Becker**, MBA (MBA ‘79)
Principal Consultant
PGBEC Consulting

**James S. Burns**, MBA (MBA ‘73)
President and CEO
AssureRx Health

**Linda C. Degutis**, DrPH, MSN (NSG BS ‘75)
Consultant

**Therese Fitzpatrick**, PhD, RN (NSG BS ’75/MS ’84)
Principal, Healthcare Transformation Services
Philips Healthcare

**Nancy L. Jones**, MD (BIO BS ’74)
Professor of Pathology
Chicago Medical School

**Katherine J. Kim**, MS, JD (CHE MS ’97, JD ’04)
Principal
Spark IP Law

**James Koziarz**, PhD (CHE BS ’71)
President and Chief Executive Officer
Rubicon Genomics, Inc.

**Maria Kuzas**, RN, MS
Commissioner
State of Illinois

**Thomas J. Murphy**, PhD
Professor of Chemistry, Emeritus
DePaul U. Depts. of Chemistry & Env Sci

**Dennis A. Schenborn** (BIO BS ’75)
Chief of Planning (retired)
Wisconsin Department Natural Resources

**Elaine T. Schenborn**, PhD (BIO BS ’75)
Senior Project Manager, R&D
Promega

**Stephen Sichak, Jr.**, MS (CHE BS ’78/MS ’80)
Senior Vice President
Becton Dickinson

**Robert P. Steele**, JD (PSY BA ’67, JD ’77)
Chief Legal Counsel (retired)
Oscar Mayer - Kraft Foods Group

**Maksim Zeldin**, FSA, MAAA (MAT BS ’07)
Senior Actuarial Associate
Allstate Insurance Company

(Parentheses Denote DePaul Degrees)
Enrollment

Enrollment in the CSH programs has grown steadily over the past five years, culminating in record-breaking enrollment for the college in 2013. The graph below shows the increase in undergraduate, graduate, and combined total enrollment. The CSH became a college of nine departments in 2011; this data reflects the programs’ enrollment growth beginning in 2009, separated out from each department’s former college.

New DePaul freshmen are choosing College of Science and Health programs for their studies. Psychology, Health science, and Biology are all on DePaul’s list of top ten declared majors for freshmen—and 90% of DePaul freshmen declare a major upon registration with the university.

51% of New Graduate Students at DePaul are in the CSH, including 17 new DNP (Doctor of Nursing Practice) students in 2013.
DePaul’s Science Programs continue to expand in breadth and depth, with new lab space construction beginning Summer 2014.

Facility Expansion: New Spaces for Learning in McGowan South and Byrne Hall

Summer 2014 will see the beginning of the fourth floor build out of McGowan South and new renovations to Byrne Hall, facilities which house several departments within the College of Science and Health. The Board of Trustees approved funding for the construction of multiple labs, classrooms and office space in McGowan South, slated to be complete by January 1, 2015. Extensive remodeling of Byrne Hall’s Department of Physics space will establish two cutting edge studio classrooms; construction in Byrne Hall will be completed by September 2014.

Associate Dean and Associate Professor of Chemistry Richard Niedziela has been the liaison to Facility Operations for the duration of the expansion project. Dr. Niedziela reports that the McGowan South build out will include: a new anatomy and physiology lab, a general chemistry lab, a physical chemistry lab, and a general, flexible lab space; three health science research labs; and two open concept research labs for chemistry and biology. *The build out will allow course offerings to keep pace with enrollment increases and provide space for future research.* Dr. Niedziela indicates, “This investment by the university in adding additional teaching and research space will allow the CSH to effectively manage its enrollment growth over the next decade.”

The teaching labs will be well equipped thanks to Academic Affairs, which provided funds to furnish the new spaces with state of the art equipment, to support faculty research, provide for student research experiences, and create interdisciplinary research opportunities. The instrumentation will give students hands-on experience before they enter internships and the work force, actively applying the learning afforded to them by the CSH. Indicative of institutional support of the sciences at DePaul, these construction projects will direct more resources to the exceptional programs housed by the CSH.
Facilitating Faculty Success

New faculty hires are well-equipped to succeed at DePaul’s College of Science and Health by participating in a series of monthly meetings throughout the academic year under the New Faculty Seminar program.

**New Faculty Seminar Topics:**
- Overview of the CSH
- Teaching
- Service
- Internal Funding
- Research
- Faculty Evaluation Processes
- Peer/Mentor Relationships
- Summer Research Support
- Undergraduate Research Assistants
- Faculty Mentoring of Research Students
- Academic Rigor and Integrity
- Tenure and Promotion
- Online and Hybrid Courses

**2013 Guest Speakers & Topics:**
- **Ayse Sahin** and **Eric Landahl**, Successful Research
- **Michael Roberts**, Academic Advising
- **Margaret Silliker**, Teaching and Mentoring Graduate Students
- **Riley Johnson**, Liberal Studies Program
- **Stan Cohn**, Excellence in Teaching
- **Joanne Romagni**, Research Services
- **Susan Loess-Perez**, Research Regulations (IRB, IBC, IACUC)
- **Chris Parker**, Library Services
- **Phillip Funk**, International Study Opportunities, Rosalind Franklin Partnership
- **Cate Ekstrom**, Office of Sponsored Programs and Research

In 2013, new tenure track faculty along with all other new full time faculty members were invited to attend the New Faculty Seminar series.

After experiencing the advantages of the first-year series of New Faculty Seminars, many faculty requested additional seminars. Richard Niedziela and Mona Shattell created the New Faculty Seminar Plus series for colleagues in their second year and beyond to continue support and growth for the CSH faculty progressing in their careers.
With over $12 million in active grant funds, Leonard Jason runs several major projects concurrently with the aid of faculty, staff, students, and volunteers.

Research, Teaching, and Service: Three Interconnected Domains Guide the Center for Community Research

The city of Chicago, DePaul University’s home, has recognized the need for violence prevention, particularly on the south side where Leonard Jason and LaVome Robinson hold a program to curb youth stress and violence. The city has been strategizing based on available data from studies, which Jason explains have been normed by middle class samples. This current study, developed and culturally adapted by DePaul’s Dr. LaVome Robinson and funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development, focuses on African American youth in low-income neighborhoods.

Jason and Robinson review and discuss violence in structured groups of school-aged students. These small groups meet weekly to discuss conflict resolution and modes of solving problems without the use of violence toward the self or any other party. Rather than getting angry and expressing frustration through anger, students are taught to stop and think. Developing mindfulness about emotions may prevent future violence problems—a point that Jason hopes to illustrate with data.

Jason and Robinson endeavor to equip youth with strategies. Jason asks, "If there is violence in the community, in one’s own neighborhood, how does one deal with that?" This project will help kids find new ways to express their feelings and resolve conflict. The city of Chicago and Chicago Public Schools have been very interested in this project. With additional funding, the program can expand and reach a wider age range of children and youth.

* Jason has also worked extensively with chronic illness and the stigmatization of Chronic Fatigue Syndrome (CFS), also known as myalgic encephalomyelitis (ME). A debilitating illness that keeps many nearly immobilized, ME/CFS, often skewed and prevaricated as a "yuppie flu illness," actually links more closely to underrepresented groups in the lower socioeconomic classes than in the upper class. Jason has two current federally supported programs, with one epidemiologic
study trying to find the prevalence in youth, specifically how many people are affected and what characteristics present in those affected. The second study involves 6,000 college students, and Jason’s team will follow those who contract mononucleosis, tracking who gets better and who does not. Both studies also involve Ben Katz, a physician at Lurie Children’s Hospital.

This study explores a possible link between Eppstein-Barr, the cause of mononucleosis, and ME/CFS. Jason aims to help understand the possible causes of this crippling illness. Jason has conducted 15 years of epidemiology research and prevalence work in an effort to break stereotypes surrounding the illness. He has served on the Chronic Fatigue Syndrome Advisory Committee, a federal committee that makes recommendations to the Secretary of Health and Human Services.

The complex personal and social problems resulting from addictions provide fertile ground for another of Jason’s research interests. There are over 2 million people incarcerated in the United States, comprising 25% of the prison population worldwide. The startling number of nonviolent drug offenders and addicts has led Jason to secure funding to explore the routes available to former inmates when their sentences have been served. After working with Oxford House recovery homes for over two decades, Jason has witnessed their mission—to provide supportive home communities for former substance abusers to live together in sobriety—bring positive change to many lives. Two current federally funded studies will determine if Oxford Houses can change the trajectory of substance abuse by following about 500 people with substance abuse disorders in three different sets of circumstances after being released from incarceration. The three sets are as follows: individuals leaving prison and entering a staff led therapeutic community, individuals going to an Oxford House; and usual aftercare, which typically involves individuals returning to their original homes and neighborhoods.

This study hypothesizes that Oxford Houses offer a less expensive, more socially productive option for prisoners rejoining society—carrying heavy implications for the overwhelming health care needs in the United States.

Violence prevention, post-prison care, and stigmatization of disease possess a common thread for Leonard Jason: these social problems can be addressed by engaging in scientifically-based psychology research with an activism style. Adding service to research provides a unique opportunity for students to learn at the Center for Community Research, actively engaging students in the mission that compels DePaul University and the College of Science and Health.
Grant Funding

The following new local, state, federal, and private grants were awarded to faculty in the College of Science and Health during fiscal year 2013 (July 2012-June 2013)

**Bernhard Beck-Winchatz**, STEM Center, received a grant, “Training Faculty in High-Altitude Ballooning,” from the National Science Foundation.

**Karen Budd**, Psychology Department, was awarded a Teaching and Research grant as a Fulbright Senior Scholar at Tribhuvan University in Kathmandu, Nepal.

**Sarah Ann Connolly**, Department of Health Sciences, received a grant, “Herpesvirus Gene Expression in Transformed Cells,” from the National Institutes of Health, as well as a Science Undergraduate Research Grant from LI-COR Biosciences.

**Christopher Drupieski**, Department of Mathematical Sciences, received a two-year American Mathematical Society-Simons Travel Grant.

**Verena Graupmann**, Psychology Department, is mentoring a postdoctoral scholar from Munich, Stephanie Draschil, who was awarded a research grant from the German Academic Exchange Service (DAAD) for social psychology research.

**Barbara A. Harris**, School of Nursing, was awarded the “Nursing Educator Fellowship” by the Illinois Board of Higher Education.

**Wendy M. Jackson**, STEM Center, received the “Implementing the Next Generation Science Standards” grant from The Chicago Community Trust.

**Lihua Jin**, Department of Chemistry, received a DePaul-RFUMS Joint Research Grant.

**Jingjing Kipp**, Department of Biological Sciences, received a DePaul-RFUMS Joint Research Grant.

**Dorothy Kozlowski**, Department of Biological Sciences, received a DePaul-RFUMS Joint Research Grant.

**Jalene LaMontagne**, Department of Biological Sciences, received an external research grant from the Huron Mountain Wildlife Foundation, and her graduate students received external research grants from the Illinois Ornithological Society and the Illinois State Academy of Science.
Elizabeth Ellen LeClair, Department of Biological Sciences, was awarded a grant, “Development and Regeneration of the Zebrafish Maxillary,” by the National Institutes of Health.

James Montgomery and Christie Klimas, Department of Environmental Science and Studies, were awarded the 2013 People, Prosperity and the Planet (P3) Phase I grant from the Environmental Protection Agency (EPA).

Orson Morrison, DePaul Family and Community Services, was awarded several grants during the 2013 fiscal year, including “DCFS FY’13 Medicaid,” “Psychiatric Services in Mental Health Center,” “IDHS Agreement for Psychiatric Services FY 2014,” and “Medicaid Reimbursements for Psych Services FY 2014” all from the Illinois Department of Human Services; “Community Youth Development Institute” from the Community Youth Development Institute; and “CPS School Closings: Stress & Coping Intervention” from the Chicago Board of Education.

Carolyn Narasimhan, STEM Center, received several new grants throughout the 2013 fiscal year, including two DePaul Math/Science Partnership grants from The Chicago Community Trust, along with “A Partnership for a Graduate Program in Mathematics Teaching” from the Illinois State Board of Education, “Chicago STEM Education Consortium” from the Chicago Community Trust, “Algebra Common Core Leadership Program” from the Illinois State Board of Education, “CPS Transition to CCSS-M” from the Chicago Public Schools Foundation, “LSAMP DePaul” from the National Science Foundation, “Science Planning Grant” from the Chicago Community Trust, and “CCSS-M Network Partnership” from the Chicago Community Trust.

Eric Norstrom, Department of Biological Sciences, received a DePaul-RFUMS Joint Research Grant.

Ruben Parra, Department of Chemistry, received a DePaul-RFUMS Joint Research Grant.

LaVome Robinson and Leonard Jason, Psychology Department, were awarded a grant, “Social Ecology and the Prevention of Suicide and Aggression in African American Youth,” by the National Institutes of Health.

Bridget E. Tenner, Department of Mathematical Sciences, received a Simons Collaboration Grant for Mathematicians from the Simons Foundation.

Nathan R. Todd, Psychology Department, received “Understanding Social Networks in Religious Congregations” from the Louisville Institute.

Ilie D. Ugarcovici, Department of Mathematical Sciences, received a Simons Collaboration Grant for Mathematicians from the Simons Foundation.
Student Accomplishments

While by no means an exhaustive list, here are a few representative honors bestowed upon CSH students in 2013


Melissa De Castro, School of Nursing, was chosen as Schweitzer Fellow, charged with leading therapeutic workshops in nutrition and group fitness for homeless adults in Lincoln Park. The program incorporates a fully integrated range of complementary therapies, psychological support, and nutritional and self-help techniques addressing the physical, mental, and emotional needs of the homeless community.

Sarah Drummy, School of Nursing, volunteered in Honduras as part of Community-based Service Learning.

Emily Machulak, School of Nursing, volunteered in Honduras as part of Community-based Service Learning.

Andrew Martinez, Psychology Department, received “A Study of Connecticut’s Anti-bullying Legislation” from the Society for Community and Research Action.

Nicole Raucci, School of Nursing, was chosen as a Schweitzer Fellow. Raucci will implement an interactive program to improve the health maintenance of low-income, underserved older adults.

Kathryn Rico, Environmental Science and Studies, received an honorable mention from the Council on Undergraduate Research Posters on the Hill competition for her project evaluating the sediment of a northeastern Illinois wetland. Rico’s project was in the top 10% of the more than 800 applications submitted.

Ciaran Shaughnessy, graduate student in the Department of Biological Sciences, received a Journal of Experimental Biology Traveling Fellowship from the Journal of Experimental Biology and the Company of Biologists.

Nev Jones, doctoral student in the Psychology Department, was awarded a $25,000 Substance Abuse and Mental Health Services Administration (SAMSHA)
grant to study and disseminate international models of community-based service user leadership and capacity building in research.

Claudio Rivera, doctoral student in the Psychology Department, received the dissertation grant award from the Society for the Psychological Studies of Social Issues for his research on undocumented immigrants and education.

Katie McAuliff, doctoral student in the Psychology Department, co-authored a grant with Neumann Family Services that yielded a three-year, approximately $350K commitment from the State of Illinois for an innovative supported employment program.

**DePaul Discoveries, the Undergraduate Research Journal**

The following students completed research projects across the CSH disciplines with the help of faculty advisors. Their work, reviewed by the Research and Faculty Development Committee, the Faculty Editorial Board, and the Student Editorial Board, was found to be of publishable caliber. Congratulations to the following students who published their research in DePaul Discoveries (http://via.library.depaul.edu/depaul-disc/):

*DePaul Discoveries - Volume 1*

- Lauren P. Schroeder
- Sabrina A. Karczewski
- Draycen D. DeCator
- Daniel J. Clark
- Stacey Seidl
- Ikechukwu B. Achebe
- Christopher Gallardo
- Kevin R. Jansen
- Agnes Kalat
- Alex Hertel
- Samantha Sasnow
- Irina Timoshevskaya
- Jenna Bergevin
- Eliya Gwetta
- Adrian Pacurar
- Elizabeth Mai Smith

*DePaul Discoveries - Volume 2*

- Jason Kositarut
- Fiacha Heneghan
- Ashley Sliva
- Stacey Wagner
- Josh Modica
- Madeline Gemoules
- Kevin Tague
- Alexander D. Meglei
- Allison Grecco
- Kathryn Rico
- Miki Yoshimura-Rank
- Chelsea La Valle
- Lauren Smith
- Stephanie Torres
- Kristen Bernal
- Carolyn VanderMolen
Many thanks to the faculty advisors who worked closely with students to complete the research, writing and editing necessary for publication in DePaul Discoveries.

**Psychology Department**
- Patrick Fowler
- Leonard Jason
- Annette Towler
- Douglas Cellar
- Gary Harper
- Jocelyn Smith Carter
- Joe Mikels
- Karen Budd
- Antonio Polo
- Nicholas Herrera

**Department of Environmental Science and Studies**
- Judy Bramble
- Jim Montgomery
- Kenshu Shimada
- Mark Potosnak
- Jim Montgomery
- Sara Richardson
- Christi Klimas

**Department of Chemistry**
- Justin Maresh
- Matt Diszner
- Sandra Pescek
- Catherine Southern
- Roger Sommer
- Wendy Wolbach

**Department of Mathematical Sciences**
- Thomas Kyle Peterson
- A. Gatto
- Bridget Tenner

**Department of Physics**
- Anuj Sarma
- Jesus Pando
- Gabriella Gonzalez Aviles
- Robert Matson

**Department of Biological Sciences**
- Kenshu Shimada
- Jalene LaMontagne
- Dorothy Kozlowski

Special thanks to DePaul Discoveries’ Founding Editor-in-Chief, Chris Keys, Psychology Department.
Online Teaching Corner: Pedagogy in Transition

an interview with Dr. Sandra Virtue

Online courses debuted at DePaul in the Psychology Department and quickly gained popularity and traction in the College of Science and Health and throughout the university. DePaul faculty complete an intensive training called DOTS (DePaul Online Teaching Series), which provides orientation, tools, and support for instructors so effectively that it won the 2012 Sloan Consortium’s Award for Excellence in Faculty Development for Online Teaching. The intensive approval process for online and hybrid courses guarantees that several instructional designers will review and help faculty design effective and content-rich online courses. Now the CSH instructors are revolutionizing pedagogy through technology.

Pedagogical research strongly supports the transition into hybrid and online courses in the College of Science and Health. As Dr. Sandra Virtue notes, studies reveal that hybrid courses “result in the same learning—or better.”

The various new technology course offerings include hybrid courses (50% in class and 50% online) and fully online courses. One of the core benefits of these technology-steeped courses, according to Dr. Virtue, involves students’ opportunities to engage in self-paced learning. Traditional lecture-based courses use the pedagogical model in which an instructor disperses information directly to students over a defined class time. In contrast, online lectures allow students to return to the videos and revisit difficult information. Students have the ability to pause lectures and find answers to specific questions during the lectures on their own, without taking class time to bring each student’s understanding to the same level. Hybrid courses provide particular benefits because students cover background material during the online portions of the course, and come to class for intensive discussion, activities, and examples, as well as an opportunity to ask questions face-to-face with their instructor and/or fellow students.

DePaul Online Teaching Series (DOTS)

“DOTS is a faculty development program that trains and assists faculty to become successful facilitators of online learning...Faculty are introduced to online-learning best practices, hands-on innovative use of technology, quality standards for course development across all delivery formats, and are guided through the development of exemplary course sites for online and blended instruction.”

More information can be found at: https://fits.depaul.edu/Pages/Dots.aspx
online courses allow students to self-regulate and work at their own pace. The benefit to having these alternate course offerings is that it allows the CSH to better adhere to DePaul’s mission; the more diversity in course styles, the more students DePaul can serve at each student’s particular level and in the style best suited to his or her learning.

For DePaul instructors, the planning and design of hybrid and online courses takes at least as much time as traditional course preparation—and often considerably more. Lectures, assignments, and course materials must be completed and posted online, and faculty must anticipate students’ needs in addition to responding to them as they arise. Instructors monitor discussions that occur online along with grading assignments as they would in a course of any style. These efforts bear returns: students regulate themselves, have reason to investigate answers to their questions on their own before being given an answer, and can work at their own pace.

Beyond assisting faculty with transitioning into this new style of teaching, Dr. Virtue has extensive experience forming connections at DePaul. Her laboratory, the Brain and Language Lab, sits at the forefront of cognitive neuroscience research regarding how humans process information during reading. Dr. Virtue connects students and fellow researchers as they study the cognitive processes that occur in the brain when individuals comprehend text. The resulting insights into communication have engendered her many publications as well as facilitated her role in developing effective online courses based on this neuroscience research. Dr. Virtue, now a veteran of teaching online courses, describes the communication between instructor and student as both effectual and fun. She especially likes the correspondence on message boards built into the Desire To Learn system, so that students can express their opinions on course content and access their instructors for help at nearly any time throughout the quarter.

In addition to convenience of taking courses online, the benefit to the students’ learning has become clear to the College of Science and Health. The CSH will continue adding online and hybrid courses as a step into the future and a way to serve a broader spectrum of students with the consistently excellent education afforded in a traditional classroom setting at DePaul University.
Teaching Technology Innovations

Led by Jan Costenbader and Ozlem Elgun-Tillman, several faculty members in the CSH cooperatively develop online content for LSP 120: Quantitative Reasoning & Technological Literacy I with SoftChalk Cloud. Each contributor adds lectures and materials to a pool, from which faculty teaching LSP 120 pull when designing their hybrid courses–ensuring that students in different sections get consistent materials from various faculty's areas of expertise.

Elizabeth LeClair converted a traditional large lecture course, Introductory Biology, into a Team-Based Learning (TBL) course. TBL allows students to engage with each other in class, developing the interpersonal skills necessary for success in the workplace while solving problems and applying the knowledge they are gaining from outside assignments.

Nursing students participate in case studies in Nursing Simulation Labs with robotic mannequins to reinforce their clinical knowledge and skills. This team-based approach was spearheaded by Marcia Stout, Coordinator of Interprofessional Simulation Labs in the School of Nursing.

Karen Larimer has propelled Community-Based Service Learning in the Nursing graduate program MENP (Master’s Entry to Nursing Practice). Each nursing student is paired with a community organization that s/he works with throughout the program’s two year curriculum, gaining hands-on experience in an authentic health setting.

The Department of Physics has been employing flipped learning strategies to empower students as they navigate difficult subject matter, as well as team-based instruction in their courses.

The Psychology Online Degree Completion Program allows qualified transfer students to finish their degrees online with a standard Bachelor of Arts Concentration or a Human Development Bachelor of Arts Concentration.
International Reach

**Windsor Aguirre**, Department of Biological Sciences, led a workshop for 20 students and professional biologists at the Escuela Politecnical Superior del Litoral in Guayaquil, Ecuador entitled "Evaluación y conservación de recursos genéticos" (Evaluation and conservation of genetic resources), held August 14-17, 2013. In addition, he continued his research on the ecology and evolution of the freshwater fish fauna in western Ecuador. Aguirre conducted field research in July and August 2013 in the Santa Rosa River in the El Oro province with the participation of two DePaul students who also traveled to Ecuador.

**Liam Heneghan**, Department of Environmental Science and Studies, created a new short-term study abroad program to Ireland.

**Judy Bramble**, Department of Environmental Science and Studies, worked with the Study Abroad office to create the first customized curriculum connection to study abroad programs. This is being used as a model for other departments.

**Karen Budd**, Psychology Department, was awarded a Teaching and Research grant at Tribhuvan University in Kathmandu, Nepal, as a Fulbright Senior Scholar for January through May 2014.

**Christine Reyna**, Psychology Department, is collaborating with a visiting scholar, Rui Feng, from the Central University of Finance and Economics, Beijing, China to examine moral perceptions and corporate responsibility.

**Alice Stuhlmacher**, Psychology Department, is collaborating with a visiting scholar, Jens Mazei, from the University of Muenster on her ongoing research involving workplace negotiation.

**Verena Graupmann**, Psychology Department, is mentoring a post doctoral student from Munich, Stephanie Draschil, who was awarded a postgraduate research grant from the German Academic Exchange Service (DAAD) to engage in social psychology research.
Chicago Connections

DePaul Family and Community Services served nearly 800 clients during Fiscal Year 2013 (July 1, 2012-June 30, 2013).

- 300 Chicago Public School students across 48 classrooms participated in the trauma-informed stress and coping project that provided prevention interventions in schools identified for closure that primarily serve low-income and ethnic-minority children.
- 62 older adolescents were provided trauma-informed, school-based services; 95% of participants reported being the victim of or witness to violence as children.
- 13 families attended 171 Parent-Child Interaction Therapy (PCIT) sessions.
- 72 child and 69 parent interviews were conducted through the ACT/ADAPT depression treatment program.
- 20 children participated in early childhood social skills groups at the St. Vincent DePaul Center.
- 49 comprehensive Psychological Evaluations were completed, mainly funded through State Medicaid and the Department of Child and Family Services.

DePaul Family and Community Services also established a new partnership with Community Youth Development Institute in the Auburn-Gresham neighborhood, an alternative high school, and established formal partnerships with Chicago Public Schools and the Illinois Department of Children and Family Services. FCS held exploratory meetings with Access Community Health Network to discuss a primary health-behavioral health integration pilot project. Staff received training on Trauma and Community Violence through the University of Illinois at Chicago partnership.

Doug Bruce, Department of Health Sciences, expanded his research program to include local community-based research partnerships with the Broadway Youth Center (BYC) and the Center for Latino Access to Research Opportunities (CLARO) and signed a memorandum of understanding to collaborate on community-based participatory research with BYC, a program of Howard Brown Health Center seeking to improve the well-being and quality of life for lesbian, gay, bisexual, transgender, queer, questioning and intersex youth and youth experiencing or at-risk for homelessness who would otherwise have little access to healthcare and support services.
Jim Montgomery and Christie Klimas, Department of Environmental Science and Studies, received funding from the Environmental Protection Agency (EPA) to work with a team of six undergraduate students to use soil science to identify ways to revitalize vacant lots near the Gary Comer Youth Center in Chicago’s Greater Grand Crossing neighborhood on the South Side. This P3 (People, Prosperity and the Planet) grant allows the group of DePaul students to use soil quality analysis to determine appropriate types of green infrastructure redevelopment of vacant lots. This information is being used in a DePaul Landscape design course to create models of green infrastructure development options. Jim Montgomery and Christie Klimas also ran Discover DePaul, a 3-week summer science program for students from the South Side in partnership with the Gary Comer Youth Center.

Barbara Harris and Mona Shattell, School of Nursing, established a relationship with Turning Point Behavioral Health Center in Skokie, IL, to conduct community-based participatory research with The Living Room, an innovative alternative treatment environment for persons in emotional distress.
Mission & Scholarship in the CSH

DePaul University strives to offer a world-class education to every student, a philosophy reflected in the university mission. DePaul and the CSH track several demographics, including comparing employment outcomes for often underserved first-generation students alongside their non-first generation counterparts. Student employment and graduate school enrollment outcomes, separated by this demographic factor, follow.

Overall, 85% of 2013 CSH Bachelor’s Degree recipients were employed and/or in graduate school six months after degree completion.

As DePaul’s Vision 2018 states, “The university will provide all students an academically challenging environment, consistently high-quality course offerings and teaching excellence.” The CSH offers a range of scholarships and helps students find applicable grants and loans in an effort to remove roadblocks to students of promise regardless of economic or other potentially prohibitive situations—and to equip these students to enter the workforce as capable wage earners.

One mode of supplying students with ample opportunity includes connecting students with internships, volunteer projects, and on- and off-campus employment. This chart shows statistics for first generation and non-first generation students’ engagement in these activities, both sanctioned by the CSH and outside of the college. The numbers reflect a majority of students volunteering and almost half holding internships; the CSH is committed to expanding internship programs and volunteer venues for students even further in coming years.
The College of Science and Health also tracks student experience and employment outcomes by gender. Statistics relating to employment and graduate school for CSH students six months after graduating follow.

In alignment with DePaul’s **Vision 2018** goal to **Foster Diversity and Inclusion**, the CSH works to support the “greater diversity of race and ethnicity, gender and sexual orientation, faith, place of origin, life experience, political perspective and economic condition [which] deepens the educational experience of every student and enriches the worklife of every faculty and staff member.” Tracking and following data trends over various demographics ensures that the CSH continues enjoying the benefits of increasing diversity.
“SACNAS forms a community where students do not fail because they do not find a support community—and what’s more, we can help them succeed.”
-Jesús Pando, Chair, Department of Physics

Community, Culture, and Science: Students Illuminate DePaul’s SACNAS Chapter

The students of DePaul’s chapter of SACNAS (Society for the Advancement of Chicanos and Native Americans in Science), a faculty- and staff-supported organization dedicated to the advancement of Hispanic/Chicano and Native American scientists, defined ambitious goals over the past year. Their success in establishing community among DePaul’s science students becomes immediately clear upon speaking with this devoted group: the students’ passion for their studies and support for each other engenders the favorable outcomes they have achieved. Throughout the College of Science and Health, SACNAS students co-sponsor lectures, visit with various classes, and recruit fellow students to join and reap the benefits of the organization, which has 100 chapters across the United States.

The community and scholarly support provided by SACNAS includes attendance at scientific conferences, most notably the Annual National SACNAS Conference, which provides networking opportunities, scientific workshops and peer support that often result in internships and admission into graduate and professional programs. The faculty advisor for SACNAS, Jesús Pando, Associate Professor and Chair if the Department of Physics, has been a member since 1999. Upon coming to DePaul, Dr. Pando noticed a segment of students missing from science programs, and established a SACNAS chapter. Pando particularly emphasizes the importance of the SACNAS conference as a “transformative experience for students.” The numbers of DePaul students attending the annual conference increased exponentially from the first year, in which four students accompanied Pando, to the second year, in which sixteen students attended. In 2012, the chapter was honored with the “Most Improved Chapter” award and the following year the DePaul chapter was selected by the SACNAS national organization as the 2013 Undergraduate Chapter of the Year. SACNAS encourages attendance at a number of other scientific conferences as well, such as the DePaul Science, Math and Technology showcase, the Louis Stokes Alliance for Minority Participation (LSAMP)
Spring Symposium and the Chicago Area Undergraduate Research Symposium (CAURS). The goal of career development makes SACNAS a pragmatic group for students. In 2013, SACNAS held a research and career event with a panel of engineering, biology, medical, and education professionals. To attain their goal of academic support, SACNAS has held study events, an active reading workshop, a free GRE prep course, and formed study groups. The chapter also organized workshops to assist students with their resumes, personal statements and research poster presentation skills, all of which are vital for future employment and/or education. SACNAS aims to help students become better candidates.

Rhonda Harley, Assistant Director of Research and Student Services in the CSH Office of Advising and Student Services, serves as a staff advisor for SACNAS. Her experience with the SACNAS chapter at Colorado State, combined with her area of expertise, puts her in a unique position to help students—and Pando notes that “Rhonda’s energy has really helped make SACNAS sustainable at DePaul.” Rhonda’s passion for helping students achieve their goals has led her to support SACNAS objectives that make students ready for professional school and the workforce, such as networking and research opportunities. One example of SACNAS expanding research

### CSH Undergraduate Student Employment Outcome Demographics

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Employed and/or in Grad School</th>
<th>In Grad School</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unspecified</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Latino</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This graph shows employment outcomes 6 months after graduation from the CSH undergraduate programs based on student-identified ethnicity.

### CSH Graduate Student Employment Outcome Demographics

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Employed and/or in Grad School</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
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<tr>
<td>Unspecified</td>
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<tr>
<td>International</td>
<td></td>
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<tr>
<td>Latino</td>
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<tr>
<td>Asian</td>
<td></td>
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<tr>
<td>African-American</td>
<td></td>
<td></td>
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<tr>
<td>White</td>
<td></td>
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</tr>
</tbody>
</table>

This graph shows employment outcomes 6 months after graduation from the CSH graduate programs based on student-identified ethnicity.
opportunities in 2013 is a student-led research project. Seven students without prior research experience tested lead levels in DePaul water based on three variables: older versus newer pipes, faucets versus drinking fountains, and the distance from areas of recent construction. A DePaul alumnus from Environmental Science consulted on the project, exemplifying the strong connection between the current DePaul community and those who have graduated and gone into science fields.

Deepening the community connection, SACNAS held a parent workshop that allowed family members to tour DePaul’s laboratories and facilities. Faculty and alumni attended a round table discussion held for the students and parents. Student and SACNAS member Maria Sanchez said the event increased parents’ awareness of SACNAS students’ studies and research and facilitated a connection between parents and faculty. The goal, to “show parents what it is like to be a science major,” was achieved according to Sanchez. Family involvement returns to the heart of SACNAS: Pando states that “SACNAS forms a community where students do not fail because they don’t find a support community--and what’s more, that we can help them succeed.” Pando goes on to say that “a celebration of the science and a celebration of the culture builds a community.” Thanks to Pando and Harley’s efforts and the high caliber of students at DePaul involved in SACNAS, many more students prepared themselves in 2013 for summer programs, professional programs, and PhD programs.
Program Advancements in 2013 – College of Science and Health Curricula

**New Programs**

- Accelerated bachelor’s degree in Environmental Science (BS) or Studies (BA)
- Master’s degree in Sustainable Management (MS)
- Certificate in Mathematics for Community College Teaching
- Minor in Health Sciences

**Collaborative Programs**

- Combined Bachelor of Science/Doctor of Medicine program between DePaul University’s Health Sciences Department and Rosalind Franklin University of Medicine and Science (RFUMS)
- Combined Bachelor of Science/Master of Science in Physician Assistant Practice program between DePaul University and Rosalind Franklin University of Medicine and Science (RFUMS)

**Expanded Programs**

The Physics Master of Science degree requirement increased from 44 credit hours to 48 credit hours.

**Renamed Program**

The Experimental Psychology Program became known as “Psychological Sciences.”
Students to Professionals: Career-Focused Programs and the Rosalind Franklin Alliance

During 2013, the College of Science and Health established new mutually beneficial connections with Rosalind Franklin University of Medical Sciences (RFUMS) under the guidance of the Associate Dean for External Relations, Dr. Phillip Funk. The alliance between the two universities now includes joint research opportunities, collaborative programs, and site-sharing. One of the most exciting developments occurred as the College of Science and Health initiated the Pathways Honors program to accelerate DePaul students’ entrance into professional school. Highly qualified undergraduate students can apply for the Pathways Honors program where they will receive mentoring from RFUMS faculty. CSH students can take advantage of Accelerated Degree 3+ Options, which allows for three years spent in undergraduate studies followed by direct entry into graduate school at RFUMS. The approved accelerated entry programs include Medicine (MD), Pharmacy (PharmD), Podiatry (DPM/PhD), Physician Assistant (MS), Physical Therapy (DPT) and Pathologists’ Assistant (MS). The first cohort of Pathways Honors students entered DePaul as part of the alliance in 2013.

Rosalind Franklin gives special consideration to DePaul students in the Traditional Degree 4+ Option, which explicitly prepares students for graduate school at RFUMS or other desired programs. The Pre-health Advising Committee (PAC), chaired by Dr. Funk and the Assistant Dean for Academic Services, Michael Roberts, assists students and recent alumni with entrance to professional schools. Lindsey Burdick, the CSH’s dedicated pre-health staff advisor, and the PAC faculty mentors help future applicants design a pre-professional program that fulfills requirements for admission to professional schools, including volunteer hours and shadowing experience. The PAC produces a committee letter for each qualified student to send to potential schools, and prepares students to produce application essays and personal statements as well as interview successfully. These efforts by the CSH strengthen student preparation for continued schooling as well as the connection between DePaul and RFUMS.

The DePaul/RFUMS alliance provides research funding for CSH students through the Science Summer Research Program. This program enables students to have meaningful, productive experiences over the summer that fortify their candidacy at professional schools. This program gives CSH students additional opportunities to network with RFUMS students and faculty and connect with advisors.

RFUMS agreed to open a new site of the DePaul College of Science and Health Master’s Entry to Nursing Program (MENP) on their North Chicago campus; the first group of 33 fulltime graduate students enrolled in 2013. The new site allows students greater access to DePaul programs, and further strengthens the bond between the two institutions. The College of Science and Health at DePaul University and the Rosalind Franklin University of Medicine and Science anticipate a productive partnership that will continue to evolve.
After graduating from DePaul, 83% of College of Science and Health students are employed or in graduate school after six months. The following chart shows the figures for CSH students applying to professional schools.

<table>
<thead>
<tr>
<th>Program</th>
<th># Applicants</th>
<th># Admitees</th>
<th>% Accepted</th>
<th>Universities Matriculated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>40</td>
<td>18</td>
<td>45.0%</td>
<td>University of Iowa, Loyola University (2), University of Illinois (2), Harvard, University of Rochester, Chicago Medical College, St. Louis University, University of Minnesota, Marian University, A.T. Stills University, Lake Erie – Seton Hill (2), Midwestern University (4)</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>21</td>
<td>6</td>
<td>28.6%</td>
<td>Mass College, Midwestern University (3), Northwestern University, UW- Lacrosse</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>13</td>
<td>5</td>
<td>38.5%</td>
<td>Governors State University, University of Vermont, Nova Southeastern University, MGH Institute of Health Professions, Northwestern University</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>10</td>
<td>5</td>
<td>50.0%</td>
<td>University of Illinois (2), Chicago State University, Maryland University, Midwestern University</td>
</tr>
<tr>
<td>Nursing</td>
<td>2013 data not available</td>
<td>2013 data not available</td>
<td>2013 data not available</td>
<td>2013 data not available</td>
</tr>
</tbody>
</table>

The College of Science and Health assists students applying for professional schools by offering a multitude of resources through the CSH Advising and Student Services Office. The CSH’s Pre-Health Advising Committee (PAC) interviews and writes letters of recommendation for DePaul students entering health careers. More information can be found at [http://csh.depaul.edu/](http://csh.depaul.edu/).
2013 College of Science and Health Faculty Publications

Department of Biological Sciences

Windsor E. Aguirre
Assistant Professor


Jason Bystriansky
Assistant Professor


Stanley Cohn
Professor

William Gilliland
Assistant Professor


Jingjing Kipp
Assistant Professor

Dorothy Kozlowski
Professor


Elizabeth LeClair
Associate Professor
Jalene LaMontagne
Assistant Professor

Carolyn Martineau
Laboratorian

Eric Norstrom
Assistant Professor

Margaret Silliker
Professor

Timothy Sparkes
Associate Professor

Department of Chemistry

Kyle Grice
Assistant Professor

Gregory Kharas
Professor
Copolymers of Styrene. 3. Oxy Ring-disubstituted 2-Cyano-3-phenyl 2-propenamides. G.B. Kharas, B.L. Hill.


Ruben Parra
Professor

Cathrine Southern
Assistant Professor

Environmental Science and Studies

Liam Heneghan
Professor

Beth Lawrence
Assistant Professor

Mark Potosnak
Assistant Professor
laboratory projects conducted by undergraduate students in an environmental chemistry course. In: Proceedings of the 4th Annual Academic High-Altitude Conference. Upland, IN: Taylor University.


Kenshu Shimada
Professor


Department of Health Sciences

Douglas Bruce
Assistant Professor


Sarah Connolly
Assistant Professor


regions of Epstein-Barr virus glycoprotein B (gB) can function in the context of herpes simplex virus 1 gB when substituted individually but not in combination. *Viruses Res*, 171, 227-230.

Craig Klugman
Chair of the Department of Health Sciences, Professor


A. Eduardo Gatto
Associate Professor

Juan Hu
Assistant Professor

T. Kyle Petersen
Associate Professor


Claudia Schmegner
Associate Professor

Bridget Tenner
Associate Professor


**School of Nursing**

Kim Amer
Associate Professor


Elizabeth Florez
Clinical Assistant Professor

Paula Kagan
Associate Professor


Mona Shattell
Associate Dean for Research and Faculty Development; Associate Professor, Nursing; Associate Professor, Community Psychology


clinicians can learn about the climate change debate. *Issues in Mental Health Nursing, 34*, 842-843.


Matthew Sorenson
Assistant Director, Master's Entry to Nursing Practice Program; Associate Professor


Joseph Tariman
Assistant Professor

Uta Tichawa
Clinical Assistant Professor

Department of Physics

Mary Bridget Kustusch
Assistant Professor


**Psychology Department**

Suzanne Bell
Associate Professor

Karen Budd
Director of Clinical Training; Professor

Linda Camras
Psychological Science Program Director; Professor

Jessica Choplin
Associate Professor


Joseph Ferrari
Professor & St. Vincent de Paul Professor


McAuliff, K.E., Williams, S. M., & Ferrari, J. R. (2013). *Social justice and the university community: Does campus involvement make a difference?*. *Journal of Prevention & Intervention in the Community,* 41, 244-254.


Kathryn Grant
Professor


Verena Graupmann
Assistant Professor


Megan Greeson
Assistant Professor


Jane Halpert
I-O Program Director; Professor

Leonard Jason
Director of Center for Community Research; Professor


Christopher Keys
Professor


Gerry Koocher
Dean of the College of Science and Health; Professor


Yan Li
Associate Professor


Susan McMahon
Chair, Psychology Department; Professor


Joseph Mikels
Associate Professor


Antonio Polo
Associate Professor


Kimberly Quinn
MS Program Director; Associate Professor


Christine Reyna
Department Associate Chair; Associate Professor


Bernadette Sanchez  
**Director, Community Program; Associate Professor**  


Alice Stuhlmacher  
**Professor**  


Jennifer Zimmerman  
**Instructor**  

**STEM Center**  
Bernhard Beck-Winchatz  
**Associate Professor**  

With gratitude for your service to DePaul and the CSH Students

2013 Retirees

Barbara Cortzen, Associate Professor
Department of Mathematical Sciences
33 Years of Service

Constantine Georgakis, Associate Professor
Department of Mathematical Sciences
50 Years of Service
This 2013 Annual Report was prepared by Mona Shattell, PhD, RN, FAAN, and Abigail Ingram, and made possible by the efforts and contributions of the faculty and staff of the College of Science and Health.

Special thanks to

Lindsey Burdick  
Pre-Health Advisor, CSH Office of Advising and Student Services

Dominika Chafai  
Business Manager, College of Science and Health

Rhonda Harley  
Assistant Director of Research and Student Services, CSH Office of Advising and Student Services

Leonard Jason  
Director, Center for Community Research

Gerald Koocher  
Dean, College of Science and Health

Orson Morrison  
Director, DePaul Family and Community Services

Robert McCarthy  
Post-Award Coordinator, Office of Research Services

Jesús Pando  
Chair and Associate Professor, Physics Department

Lucinda Rapp  
Assistant to the Dean, College of Science and Health

Karen Reinbold  
Assistant Dean for Budget, College of Science and Health

Michael Roberts  
Assistant Dean for Academic Services, CSH Office of Advising and Student Services

Margaret Silliker  
Associate Dean of Graduate Studies, College of Science and Health

Sandra Virtue  
Associate Professor, Psychology Department