The School of Health Sciences strives to foster a rich intellectual environment where great research thrives. Our faculty actively conduct and collaborate on research, engaging students wherever possible.

Our faculty research focuses on a large range of topics intended to promote excellent and ethical clinical interventions, improve the quality of life of people from diverse populations, enhance the effectiveness of service delivery and advance the education provided at the SHS.

A Message from the Dean

The School of Health Science has a reputation for educating outstanding health care professionals. This education is delivered by a very talented and knowledgeable group of professionals. Recently, there has been a desire to increase the research activity and scholarly productivity of the faculty. To this end, I have been able to secure a small annual budget to support faculty research. We have established a Research Support and Development Committee with Dr. Meira Orentlicher and Dr. Frank Gardner as co-chairs. This committee has been responsible for running research events and for soliciting proposal for faculty research grants. The committee reviews these proposals and sends them to me for approval. This program has been very successful in helping faculty members do their research. This year, the emphasis will be on faculty members publishing their work in peer-reviewed journals. I have appointed Dr. Meira Orentlicher as Director of Research and Faculty Scholarship. In this role, she will work with the Department Chairs on plans to encourage and support faculty members in their efforts to publish their research. I am anticipating a successful effort for the project.

Sincerely,

Louis H. Primavera, Ph.D.
Dean
A SOFTWARE NAMED ‘R’
by Annette Carr

While many researchers rely on SPSS or SAS to handle their statistical data, many users are starting to migrate to R software. Unlike SPSS and SAS, which are proprietary and costly to buy, R is a free, open source software that may be used for computing statistics while conducting research. Besides the cost, there are many advantages to R. It works with Windows, Macintosh, UNIX, and Linux platforms. It runs wide variety of functions, from basic to advanced; functions such as data manipulation, graphics, and statistical modeling are available. Because the software is open sourced, many developers have written and distributed add-on packages at no cost to the user, in order to improve functionality.

While there are many advantages to R software, it is not without its downsides. Traditional software packages, like SPSS and SAS, have a very comprehensive user interface and are easy to use. For example, SPSS interface looks very much like an excel spreadsheet, with which most people are familiar and using. In contrast, R has a large learning curve and can be less user friendly. It relies more on programming and coding knowledge, with which many researchers do not have experience. However, there are sources online to help researchers learn the programming fundamentals that are required to use R. Another area where R lacks is in technical support. Both SPSS and SAS are commercial products and have customer/technical support available to users. Since R is open sourced software, there is no official support. However, a large community of R users can help one another troubleshoot problems and offer peer support to one another. If users are not comfortable with peer support, there are third party groups that provide support for R and respond to problems rather quickly.

R software can be downloaded/installed at https://cran.r-project.org

A session about R will be offered at the SHS Faculty Research Retreat on February 12, 1:30-2:30 PM.

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<thead>
<tr>
<th>Advantages</th>
<th>SAS</th>
<th>SPSS</th>
<th>R</th>
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</thead>
<tbody>
<tr>
<td>1. High adoption rate in major industries</td>
<td>1. Used a lot in universities</td>
<td>1. Big community who creates libraries</td>
<td></td>
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<tr>
<td>2. Flow based interface with drag and drop</td>
<td>2. Good user interface with extensive documentation</td>
<td>2. Free</td>
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<tr>
<td>3. Official support</td>
<td>3. Click &amp; Play functionality</td>
<td>3. Early adopter in explanatory and predictive modeling</td>
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<tr>
<td>4. Handling large datasets</td>
<td>4. Writing code made easy using the ‘paste’ button.</td>
<td>4. Easy to connect to data sources, including NoSQL and web scraping</td>
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<tr>
<td>5. ‘PROC SQL’</td>
<td>5. Official support</td>
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<table>
<thead>
<tr>
<th>Disadvantages</th>
<th>SAS</th>
<th>SPSS</th>
<th>R</th>
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</thead>
<tbody>
<tr>
<td>1. Relatively high cost</td>
<td>1. Relatively high cost</td>
<td>1. Can be slow with big datasets</td>
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<tr>
<td>2. For not-standard options not in interface, you’ll need to write the code</td>
<td>2. different licenses for different functionalities.</td>
<td>2. Steep learning curve</td>
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<tr>
<td>3. Slow adapting to new techniques</td>
<td>3. Syntax limited</td>
<td>3. No official support</td>
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<tr>
<td>4. Different programs for visualization or Data Mining</td>
<td>4. Slow adapting to new techniques</td>
<td>4. No user interface</td>
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<tr>
<td></td>
<td>5. Slow in handling large datasets</td>
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FOCUS ON THE SPEECH-LANGUAGE PATHOLOGY DEPARTMENT (SLP)

2019 was a productive year for faculty in the Speech-Language Pathology (SLP) Department. Some published books and peer-reviewed articles, while others collaborated with students to present at nationally renowned conferences. At the same time, new research projects were developed.

Publications

EHRgo is an electronic health records system used by many healthcare education programs, including our school. Dr. France Weill published a patient case study for EHRgo, to enhance students’ experiences by providing them with clinical-based learning opportunities.

Dr. Irina Vaynshteyn published an article in the journal Studies in English Language Teaching entitled, “Effects of age of arrival on acquisition of formulaic expressions in the second language” (vol. 7(4), pp. 391 – 418). The article can be accessed here: http://www.scholink.org/ojs/index.php/selt/issue/view/282

Special Issue on Cluttering Edited by Dr. Isabella Reichel

Perspectives of the ASHA Special Interest Groups is a group of scholarly reviewed journals, published by the American Speech-Language and Hearing Association (ASHA). These journals focus on bridging the gap from research to practice and advancing knowledge translation. Dr. Isabella Reichel was invited to serve as the Guest Editor of a special issue on cluttering in Perspectives of the ASHA Special Interest Group 17: Perspectives on Global Issues in Communication Sciences and Related Disorders (Vol. 4(6), Dec. 26, 2019). The special issue can be accessed here: https://doi.org/10.1044/2019_Dec2019PerspMasthead

Dr. Reichel authored 3 articles in this issue:

Introduction to the forum on cluttering: Rays of hope shine around the world (pp. 1566-1567).

In this article Dr. Reichel introduced the special issue. In the 10 years since the International Cluttering Association (ICA) was created, this organization has been growing in the scope of its initiatives, and in the variety of resources it makes available for people with cluttering (PWC). However, the awareness of this disorder and of the methods for its intervention remains limited in countries around the world. This issue represents the multinational and multicultural engagements of the ICA's Committee and its international representatives.

A decade of collaboration among international representatives of the International Cluttering Association (pp. 1573- 1580).

In this article, Dr. Reichel collaborated with authors from Nigeria, France, Hungary, Portugal, Belgium, Russia, Jordan, India, Japan, Turkey, Lebanon, India, Germany, Argentina, and Taiwan. They discuss how research in cluttering developed in the past 10 years. Research-based interventions may be developed in one part of the world, and implemented, tested and taught in others. They identified five major themes in the cluttering literature: research, cluttering awareness, professional preparation, intervention, and self-help groups.
Clinical success using the Audio-Visual Feedback Training for cluttering (pp. 1589-1594).
In this article, Dr. Reichel collaborated with Y. vanZaalen to investigate the effect of a relatively new, but promising strategy for addressing inadequate speech monitoring skills and other parameters of communication in people with cluttering (PWC), the auditory–visual feedback (AVF) training. Specifically, their study examined the effects of AVF training on articulatory accuracy, pause duration, frequency, and type of disfluencies of PWC, as well as on the emotional and cognitive aspects that may be present in clients with this communication disorder.

In addition, Dr. Reichel’s work with the Russian-Speaking Aphasia Group at Touro was featured in Summary of Norman Doidge’s The Brain That Changes Itself, by Swift Reads, Key Insight 5 (March 17, 2019).

Presentations
Last May, Dr. Steven Blaustein, Dr. Rosalie Unterman, Dr. France Weill, and Dr. Isabella Reichel joined together to present a one-day seminar, “Focus on contemporary tools and resources for speech-language pathologists.” The workshop was held at our Brooklyn Campus and participants earned ASHA CEUs.

Faculty and students presented at the ASHA 2019 Convention in November, which took place in Orlando, Florida:

Dr. Steven Blaustein and Prof. Hindy Lubinsky presented a poster, "Graduate level class presentations in Speech-Language Pathology programs: Rethinking the model."

Photo: Prof. Hindy Lubinsky and Dr. Steven Blaustein
Dr. Rosalie Unterman and Prof. Sarah Shain present a poster, “Simulated or actual assessments in graduate level Speech-Language Pathology: One, the other or both?”

Photo: Dr. Rosalie Unterman and Prof. Sarah Shain

Dr. Irina Vaynshteyn, Prof. Rachelle Kirshenbaum and students D. Zinn, A. Cheng-Hsu, J. Murphy, G. Williams, G., and J. Apelbaum, presented a poster, “Speech language pathologists’ use of nonspeech oral motor exercises as an intervention technique.”

New Research project
Prof. Rachelle Kirshenbaum began an exciting research project in collaboration with Joan Wagner, Chief Librarian of the Bay Shore Library, and a Biomedical Engineering Department in another college. Using the 3-D printer, which is housed in the Bay Shore Library and was purchased by a Dean’s Research Award in 2016, the students print 3-D educational models representing various speech, language and hearing disorders that the students are studying in class (photos 1 & 2). The new research project is designed to assess the outcomes of this unique program. Results from a pilot phase showed students’ increased motivation to learn about various disorders. They also acquired a deeper understanding of the disorders through the use of the visual, 3-D models. Stay tuned for the next phase of this study, which is planned for next year.
Photo 1:
 Students Joshua Kellman and Matthew Wielderman

Photo 2: Prof. Rachelle Kirshenbaum with students Ashley Flynn, Jessica Podhaisky, Deanna Chillemi, and Esther Nigri
Two collaborative articles by physical therapy faculty:

Jill Horbacewicz (PT), and Vanessa Reddin (PT):
A response to the commentary entitled, “Clarifications on the NPTE revisions and role in licensing: Comment on Kume, Reddin, & Horbacewicz (2018)” (with J. Kume).

Jill Horbacewicz (PT), Shira Weiner (PT), and Yocheved Bensinger-Brody (PT):
Improving the quality of consumer health information on Wikipedia: Case series (with L. Rasberry).
*Journal of Medical Internet Research, 21*(3) e12450. doi: 10.2196/12450ISSN: 1438-8871

Yocheved-Bensinger-Brody (PT):
Commentary on functional task training combined with electrical stimulation improves motor capacity in children with unilateral cerebral palsy: A single subject design (with S. Hastings)
*Pediatric Physical Therapy, 31*(2), 216

Virginia Koenig (OT):
Health literacy: A universal call to action.
*Journal of Psychology and Mental Health Care, 1*(11), 1-2. doi: 10.31579/ 2637-8892.19/011

Workshop series for occupational therapists using the US Agency for Healthcare Research and Quality’s Health Literacy Universal Precautions Toolkit and other supported tools (with I.M. Provident)
*Health Education Journal, 78*(4), 451-463

Meira Orentlicher (OT):
Best practices in transition planning for independent living and workplace readiness.

The experiences and perceptions of collaboration between OTs and other school professionals (with D. Lashinsky, S. Bergstein Teixeira, & A. Mograby)
*American Journal of Occupational Therapy, 73*(4_Supplement_1), 7311505127. doi: 10.5014/ajot.2019.73S1-PO4003

The experience of direct-care providers who support young adults with disabilities during the transition from school to adult life in the community [Abstract] (with R. Fazilov, N. Taubman, & T. Weinstock)
*American Journal of Occupational Therapy, 73*, 7311505097. doi: 10.5014/ajot.2019.73S1-PO20137311505127
Sandy Russo (Nursing):
A comparison of two case studies using the Roy Adaptation Model: Parents of opioid-dependent adults and bariatric surgery (with S.L. Baumann, M. Velasco-Whetsell, & C. Roy)

*Development and psychometric analysis of the Roy Adaptation Modes Scale (RAMS) to measure coping and adaptation*
Doctoral dissertation, CUNY Graduate Center. Retrieved from [https://academicworks.cuny.edu/gc_etds/3117](https://academicworks.cuny.edu/gc_etds/3117)

Corinne Settecase-Wu (Nursing):
*Living as a dying child: A Gadamerian analysis of the poetry of Mattie J. T. Stepanek*
Doctoral dissertation, CUNY Graduate Center. Retrieved from [https://academicworks.cuny.edu/gc_etds/3160](https://academicworks.cuny.edu/gc_etds/3160)

Joan Wagner (Library):
Creating 3D-printed assistive devices: An interprofessional education collaboration (with B. Leeman, K. Pardini, & I. Anand)
*SIS Quarterly Practice Connections, 4*(3), 12-14

Julie Kardachi (OT):
Fall prevention: What you can do to help patients (with C. Carlucci)
*Today’s Geriatric Medicine, 12*(4), 18-21

Julie Kardachi with a copy of her publication
LISTING AUTHORS ON YOUR RESEARCH PAPER

by Annette Carr

In an ideal world, all authors listed on an academic paper would be seen as an equal contributors to the research and of equal importance. However, this is not the case. For a long time, the academic industry has set the precedent that the first author listed on the paper is the primary author who did the most work and is of the most importance. Unfortunately, this precedent has caused much confusion among readers, researchers, and academics alike as to how much each author is worth to each academic paper.

The first author’s name on an academic paper is a much sought after position. The person in this spot often has the good fortune of his or her name associated with the paper, since citation rules often limit in-text citations to the first author’s last name. This causes the rest of the authors in a citation to receive the unfortunate “et al” label. This tradition has led to the assumption that the rest of the authors listed are in descending order of contribution or importance. In addition to the first author listed, the name of the last author listed is also a coveted position since it has been traditionally reserved for the supervisor of a project.

In contrast to this traditional way of listing authors, there are a number of other methods used to list authors on a paper:

Alphabetical – This is a method where by authors are listed in alphabetical order regardless of contribution effort. This is very convenient for large group projects.

Contribution Statement – This method places an asterisk next to each author’s name, with a statement as to what they directly contributed to the article. This is becoming a more popular method, as

(Continue →)

HUMAN SUBJECTS RESEARCH PROTECTION NEWS

by Glenn Davis

We are still only in the first year of the major changes brought about by the implementation of the Revised Common Rule in January 2019. Investigators and the Health Sciences IRB (HSIRB) continue to work through the new requirements and adapt accordingly.

Based upon user feedback and IRB member discussions about the new human subjects protections materials published almost 11 months ago, both Touro IRBs have embarked upon a review of the website and continued improvement to the forms, guidance, and other information provided. In the meantime, investigators and the HSIRB and IRB #1 continue to work through the new requirements and adapt accordingly.

Among important updates, of possible greatest interest to researchers will be revised mandatory training directions for use of the CITI curricula—so be on the lookout for that notice in the near future.

(Continue →)
many journals now require authors to explain their exact role in the research in addition, it is be-
coming more popular because it allows for more transparency as to how the research was conducted.

Negotiated order – This is a method whereby authors negotiate and “fight out” amongst themselves
how the author list will be written. This allows all the authors to agree upon how they should be
listed based on their efforts. Of course, the downside of this method is that it leaves less powerful
members of a research team vying for political support regardless of the work they conducted.

Since there are no rules or standards regarding listing authors, problems can arise from the lack of
transparency. The reader has to wonder how much each author actually worked on the research or
how much politics played into the decision to list an author first.

There are several solutions to the problem of first author prestige. As listed above, a contribution
statement is one of the solutions to this problem. Another solution is ORCID (Open Researcher and
Contributor ID). ORCID is a unique identifier that allows an individual researcher to connect his or
her articles and work to his or her name, regardless of what order names appear on the author list of
an article. This unique identifier also allows an individual researcher to be distinguished from other
researchers who have the same name. This allows authors to clarify what work is theirs and what
their accomplishments are.

For more information on ORCID, try these websites:

https://qa.orcid.org
https://www.elsevier.com/connect/authors-update/ten-reasons-to-get-and-use-an-orcid-id!

Additionally, we want to bring to your attention a key new development that will take place start-
ing in January 2020. After a period of deferral, the Revised Common Rule regulations will require
collaborative research be reviewed by a single IRB (sIRB) and not be the IRB at each collabora-
tor’s institution, as has been past practice. This change is significant, complex and challenging—
both culturally and operationally for investigators and the IRBs. Both Boards are preparing appro-
priate procedures, forms, and guidance to post. Informational roll out will also take place through-
out Touro, including at the local level in the near future. Again, please look for future announce-
ments about this critical change.

SHS sponsored workshops on the new HSIRB regulations are scheduled for March 10, 10:30-
11:30 and May 13, 1:30-2:30. The workshops will be offered both in person and via Zoom. More
information to follow.
In the United States, Institutional Review Boards (IRB) were developed to protect human research subjects. Their development came about due to several unethical studies that took place on human subjects in the early 20th century.

Some of these unethical studies include the following famous research studies that took place in the United States:

- Tuskegee Syphilis Study
- Project MKULTRA
- Stanford Prison Experiment
- Stateville Penitentiary Malaria Study
- Milgram Obedience Experiment
- Project Shipboard Hazard and Defense
- Operation Top Hat

The 2018 Revised Common Rule went into effect on January 21, 2019 and has an effect on the IRB process.

All studies approved after January 21, 2019 are required to comply with the Revised Common Rule. To view Touro’s page and new IRB requirements follow this link:

Below are a list of links from the U.S. Department of Health & Human Services to get information on the new IRB standards:
https://www.hhs.gov/ohrp/education-and-outreach/revised-common-rule

Below are some links to the Common Rule Requirements authored by other educational institutions:
https://research.oregonstate.edu/irb/revised-regulations
https://oprs.usc.edu/policies-and-procedures/newrule/
https://irb.ucsf.edu/common-rule
https://irb.upenn.edu/common-rule-update-2018

“Intellectuals solve problems, geniuses prevent them. - Albert Einstein
If you would like to read more about some of the American human experiment studies that led to the IRB being created, Touro College Libraries have the following books on some of the research studies:

Against their will: The secret history of medical experimentation on children in cold war America
Hornblum, Allen M., author

Behind the shock machine: The untold story of the notorious Milgram psychology experiments
Perry, Gina, author

Belmont revisited: Ethical principles for research with human subjects

Dark medicine rationalizing unethical medical research

Examining Tuskegee: The infamous syphilis study and its legacy
Reverby, Susan, author

The immortal life of Henrietta Lacks
Skloot, Rebecca, author

Journey into madness: The true story of secret CIA mind control and medical abuse
Thomas, Gordon, author

Phil Zimbardo on the Stanford Prison experiment, evil and heroism

The plutonium files: America's secret medical experiments in the Cold War
Welsome, Eileen, author
New York, NY: Dial Press, c1999

Tuskegee's truths: Rethinking the Tuskegee syphilis study
The School of Health Sciences
Research Support & Development Committee:

Frank Gardner (Associate Dean, co-chairperson)
Meira Orentlicher (OT, co-chairperson)
Yocheved Bensinger-Brody (PT)
Patricia Burke (Nursing)
Annette Carr (Library)
Tara Casimano (OT)
Caitlin Lapine (DBS)
Karrie Lindeman (DBS)
Sondra Middleton (PA)
Sara Tabaei (Library)
France Weill (SLP)

“Scientists have become the bearers of the torch of discovery in our quest for knowledge.” – Stephen Hawking