Under the Patronge of
His Highness Sheikh Khalid bin Zayed Al Nahyan

XII International Annual Conference & Eehibition

Abu Dhabi 2024

Autism

Challenges Solutions

2024

XII International Research and Practice Conference

Autism.
Challenges and solutions

27 – 30th April / 2024

Dol: 10.54878/ACS2024

Together We Can Make a Difference

معـــاً يمكـــننا إحـــداث الفـــرق

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

Organizers:

Zayed Higher Organization for People of Determination

LOTUS Holistic

ADNOC

Autism Challenge Center

Autism Research Institute

Conference Partners

دائرة الثقافة والسياحة
DEPARTMENT OF CULTURE AND TOURISM

صحة SEHA

سكينة SAKINA

دائرة الصحة
DEPARTMENT OF HEALTH

دائرة التمكين الحكومي
DEPARTMENT OF GOVERNMENT ENABLEMENT

مؤسسة التنمية الأسرية
Family Development Foundation

مدينة الشارقة للخدمات الإنسانية
Sharjah City for Humanitarian Services

كلية فاطمة للعلوم الصحية
Fatima College of Health Sciences

بوابة باحثي الإمارات
EMIRATES SCHOLAR

جامعة تبوك
University of Tabuk

ANRC
AUTISM NUTRITION RESEARCH CENTER

The Egyptian Advance Society for Persons with Autism & Other Disabilities
ADVANCE

Learning Resource Center

AL FAKHR

Phoenix
GLOBAL EVENTS

الجمعية السعودية للتوحد
Saudi Autistic Society

همة

سدرة
SEDRA

AGENCY FOR STRATEGIC INITIATIVES

SUPPORTED BY
PRESIDENTIAL GRANTS FOUNDATION

ГАЛЧОНОК
Благотворительный фонд

Доктрина

RusABA

CHROMOLAB

Moscow Institute of Psychoanalysis

Dr.SKALNY
LABORATORY

White Kids Medical

ВОРДИ

ПИМУ

Dedication

To His Highness Sheikh Khalid bin Zayed Al Nahyan.
To the shepherd of the heroes who defy the odds with their strong will and solid determination.

We dedicate this book to Your Highness as a tribute and gratitude for your great efforts in supporting and caring for people of determination and empowering them to achieve their dreams and aspirations and integrate them into society.

Thank you for your generous sponsorship of the International Conference of Autism Challengesand solutions in its eleventh session, and for your support for all your efforts and interest, wishing you continued success, progress, and the sustainability of glory and giving.

Abdullah Al-Humaidan
Chair of the Higher Committee

إهـداء

الى سمو الشيخ خالد بن زايد آل نهيان.
إلى راعي الأبطال الذين يتحدون الصعاب بإرادتهم القوية
وعزيمتهم الصلبة.

نُهدي سموكم هذا الكتاب كعرفان و امتنان لجهودكم
الكبيرة في دعم ورعاية أصحاب الهمم وتمكينهم من أجل
تحقيق أحلامهم وطموحاتهم ودمجهم بالمجتمع.

شكراً لكم على رعايتكم الكريمة للمؤتمر الدولي
للمستجدات في أبحاث التوحد بدورته الحادية عشرة.
وعلى دعمكم لكل ما تقدمونه من جهود واهتمام ،
راجين لكم دوام النجاح والتقدم واستدامة المجد والعطاء.

عبد الله الحميدان
رئيـس اللجنـة العليـا للمؤتمـر

إن الاهتمام بأصحاب الهمم وتقديم الرعاية المتكاملة وفق أعلى المعايير العالمية يأتي ضمن جوهر خطط الدولة وبرامجها لتمكينهم، لكي يصبحوا منتجين ومساهمين في خدمة بلدهم فهم جزء أصيل وأساسي من مكونات مجتمعنا دعمهم ورعايتهم مسؤولية وأمانة."

صاحب السمو الشيخ محمد بن زايد آل نهيان

رئيس دولة الإمارات العربية المتحدة

Ensuring the wellbeing of our People of Determination and providing them with comprehensive care in line with the highest international standards lies at the heart of the UAE`s plans and programmes to empower them and ensure their effective contributions to the country's development.

HIS HIGHNESS SHEIKH MOHAMED BIN ZAYED AL NAHYAN

PRESIDENT OF THE UNITED ARAB EMIRATES

صاحب السمو الشيخ محمد بن زايد آل نهيان

رئيس دولة الإمارات العربية المتحدة

HIS HIGHNESS SHEIKH MOHAMED BIN ZAYED AL NAHYAN

PRESIDENT OF THE UNITED ARAB EMIRATES

إعاقة الإنسان هي عدم تقدمه وبقائه في مكانه وعجزه عن تحقيق الإنجازات. وما حققه أصحاب الهمم في كافة المجالات وعلى مدى السنوات الماضية من إنجازات هي دليل على أن العزيمة والإرادة تصنع المستحيل، وتدفع الإنسان إلى مواجهة كافة الظروف والتحديات بثبات للوصول إلى الأهداف والغايات

صاحب السمو الشيخ محمد بن راشد آل مكتوم
نائب رئيس الدولة - رئيس مجلس الوزراء - حاكم دبي

Disability is, in fact, the inability to make progress and achievements. The achievements that people of determination have made in various sphere over the past years are proof that determination and strong will can do the impossible and encourage people to counter challenges and difficult circumstances while firmly achieving their goals.

HIS HIGHNESS SHEIKH MOHAMED BIN RASHID AL MAKTOUM
VICE PRESIDENT AND PRIME MINISTER OF U.A.E. AND RULER OF DUBAI

صاحب السمو الشيخ محمد بن راشد آل مكتوم

نائب رئيس الدولة - رئيس مجلس الوزراء - حاكم دبي

HIS HIGHNESS SHEIKH MOHAMED BIN RASHID AL MAKTOUM

VICE PRESIDENT AND PRIME MINISTER OF U.A.E. AND RULER OF DUBAI

دولة الإمارات العربية المتحدة تولي اهتماماً واسعاً بأبنائها من مختلف الفئات ولاسيما أصحاب الهمم، حيث عملت على افتتاح دور الرعاية الاجتماعية والصحية، التي تقدم لهم رعاية شاملة وخدمات نوعية تحقيقاً للرؤية السديدة للقيادة الرشيدة، التي لا تدخر جهداً في سبيل خدمة تلك الفئات لضمان تمكينهم واندماجهم في المجتمع واستغلال طاقاتهم في العمل والبناء ومؤسسة زايد العليا لأصحاب الهمم أحد المؤسسات العاملة في هذا المجال تواصل جهودها في تقديم أرقى سبل الرعاية والتأهيل لأصحاب الهمم ومنهم مصابي التوحد، مستفيدين من الدعم الكبير واللامحدود الذي تحظى به المؤسسة من قيادتنا الرشيدة، وعلى رأسها صاحب السمو الشيخ محمد بن زايد آل نهيان، رئيس الدولة، حفظه الله ورعاية سموه الموصولة لبرامج المؤسسة ومبادراتها ومشاريعها الاستراتيجية التي مكنت المؤسسة من تحقيق العديد من الإنجازات المحلية والدولية والعالمية.

إنَّ استضافة أبوظبي المؤتمر الدولي للمستجدات في أبحاث التوحد بدورته الثانية عشرة خلال الفترة من ٢٧ حتى ٣٠ ابريل٢٠٢٤ م - يأتي استكمالا للنجاحات التي تحققت في مجال رعاية وتأهيل مختلف فئات أصحاب الهمم ولاسيما مصابي التوحد، وكلنا آمل بأن تتواصل هذه النجاحات من خلال هذا التجمع العالمي وأعرب عن تقديري للقائمين على تنظيم المؤتمر، وأدعو المولى عز وجل أن يكلل جهودهم بالتوفيق والنجاح.

سمو الشيخ خالد بن زايد آل نهيان

رئيس مجلس إدارة مؤسسة زايد العليا لأصحاب الهمم - ابوظبي

The United Arab Emirates pays great attention to its people of different segments, in particular those of determination as it worked to open social and health care homes that provide them with comprehensive care and quality services in order to achieve the great vision of the wise leadership, which spares no effort to serve these groups and ensure their empowerment and integration into society, and exploitation of their potential in

work and building. Zayed Higher Organization for People of Determination, one of the organizations operating in this field, pursues its efforts in providing the best means of care and rehabilitation for people of determination, including those with autism, taking advantage of the immense and unlimited support provided to the organization by our wise leadership, led by His Highness Sheikh Mohamed bin Zayed Al Nahyan, President of the UAE, May Allah Protect him, and His Highness' continuous care of the Organization's programmes, initiatives, and strategic projects that enabled the Organization to achieve many local, international, and global achievements.

The hosting by Abu Dhabi of the 12th International Conference for Autism Research, from 27 to 30 April, 2024 - builds on previous successes in the field of care and rehabilitation of various groups of people of determination, especially those with autism. We are fully hopeful that these successes will continue through this global gathering. I express my appreciation to the organizers of this Conference, and pray to God the Almighty that their efforts bring success."

HIS HIGHNESS SHEIKH KHALID BIN ZAYED AL NAHYAN

CHAIRMAN OF ZAYED HIGHER ORGANIZATION FOR PEOPLE OF DETERMINATION - ABU DHABI

سـمـو الشيـخ خالــد بن زايـد آل نهيـان

رئيس مجلس إدارة مؤسسة زايد العليا لأصحاب الهمم - ابو ظبي

HIS HIGHNESS SHEIKH KHALID BIN ZAYED AL NAHYAN

CHAIRMAN OF ZAYED HIGHER ORGANIZATION FOR PEOPLE OF DETERMINATION - ABU DHABI

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

مؤسسة زايد العليا
لأصحاب الهمم
Zayed Higher Organization
for People of Determination

HE. Abdullah Al-Humaidan

Secretary General of the Zayed Higher Organization for People Determination

إنَّ انطلاق أعمال المؤتمر الدولي للمستجدات في أبحاث التوحد " تحديات وحلول "في دورته الثانية عشرة والذي يعقد برعاية كريمة من سمو الشيخ خالد بن زايد آل نهيان رئيس مجلس إدارة مؤسسة زايد العليا لأصحاب الهمم في مدينة أبوظبي، التي تُوفر كافة وسائل الدعم لأصحاب الهمم في المجالات الصحية والتعليم والعمل والرعاية والتنمية الاجتماعية، لبناء مجتمع متوازن ومُتماسك يستطيع مواجهة التحديات الاجتماعية المختلفة.

إنَّ تنظيم المؤتمر للعام الثاني على التوالي بمدينة أبوظبي يأتي استكمالًا للنجاحات التي تحققت في نسخته الأولى، آملين أن تتواصل هذه النجاحات من خلال هذا التجمع العالمي، والذي يتم فيه تبادل الخبرات وعرض التجارب المثمرة وطرح ومناقشة المواضيع المختلفة بشكل موضوعي وعلمي يُثري الخبرات والتجارب لجميع المشاركين والمتخصصين في هذا المجال، ليدعم تطور الخدمات وأساليب الرعاية والتأهيل للأطفال والشباب والكبار من ذوي اضطراب طيف التوحد.

يشهد المؤتمر هذا العام حدثاً خاصاً ومميزاً وهو الإعلان عن إصدار أول مجلة علمية متخصصة برعاية ودعم مؤسسة زايد العليا لأصحاب الهمم بالتعاون مع مجموعة لوتس هولستك وبالشراكة مع مركز باحثي الإمارات للدراسات والبحوث، وهي إحدى المشاريع في الخطة الاستراتيجية للمؤسسة ضمن محور التدخل المبكر والارتقاء بالرعاية الصحية، لتؤكد الريادة الحضارية والنقلة الهائلة والمسيرة المباركة لدولة الإمارات العربية المتحدة .

The launch of the 12th International Conference on Developments in Autism Research "Challenges and Solutions", which is held under the generous patronage of His Highness Sheikh Khalid bin Zayed Al Nahyan, Chairman of the Board of Directors of the Zayed Higher Organization for People of Determination in Abu Dhabi, which provides all means of support to people of determination in the fields of health, education, work, care and social development, to build a balanced and cohesive society that can face various social challenges.

Organizing the conference for the second year in a row in Abu Dhabi comes as a continuation of the successes achieved in its first edition, hoping that these successes will continue through this global gathering, in which experiences are exchanged, fruitful experiences are presented, and various topics are presented and discussed in an objective and scientific manner that enriches the experiences and expertise of all participants and specialists in this field, to support the development of services and methods of care and rehabilitation for children, youth and adults with autism spectrum disorder.

This year, the conference will witness a special and distinctive event, which is the announcement of the publication of the first specialized scientific journal sponsored and supported by the Zayed Higher Organization for People of Determination, in cooperation with the Lotus Holistic Group and in partnership with the Emirates Researchers Center for Studies and Research. It is one of the projects in the organization's strategic plan within the axis of early intervention and improving health care, to confirm the civilizational leadership, the tremendous leap and the blessed journey of the United Arab Emirates.

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

سعـــــادة الدكـتورة / نــورة الغيثـــي

وكيل دائرة الصحة – أبوظبي

Her Excellency Dr. Noura Al Ghaithi

Undersecretary of the Department of Health – Abu Dhabi (DoH)

تحرص دائرة الصحة – أبوظبي على ضمان صحة الأطفال وسلامتهم وتوفير جميع الخدمات الصحية التي يحتاجونها والارتقاء بها بما يسهم في تحقيق رؤيتها "أبوظبي مجتمع معافى"، وتولي الدائرة اهتماما بالغا بأطفال التوحد، وذلك يتجسد عبر جهودها في تعزيز التدخل المبكر والارتقاء بالخدمات الصحية والأساليب العلاجية المتاحة لهم بما في ذلك الدعم النفسي والتأهيلي. كما تواصل الدائرة دفع عجلة الجهود البحثية التي تسهم في تحقيق فهم أدق لحالات التوحد، لا سيما الأبحاث الجينية التي تساعد في تحديد العوامل الوراثية المختلفة والطفرات المرتبطة باضطراب طيف التوحد.

ويعد المؤتمر بمثابة فرصة فريدة للتعلم وتبادل الخبرات، وتوحيد الجهود الرامية في سبيل تحسين جودة الحياة لأصحاب الهمم. إن هذا المؤتمر ما هو إلا انطلاقة علمية وإضافة نوعية جسدت الرؤية الثاقبة والحكيمة لقيادتنا الرشيدة، ونتطلع إلى مزيد من الجهود والتعاون لإنجازات إبداعية رائدة لتحقيق مستقبل زاهر بإذن الله.

" معا يمكننا إحداث الفرق "

We, at the Department of Health - Abu Dhabi (DoH) are committed to maintaing the health and well-being of all children toothy ensuring their access to world-class healthcare services in the Emirate. DoH places great importance on children with autism through its early intervention efforts, ongoing development of specialized healthcare services for individuals with autism, with emphasis on psychological and rehabilitative support. DoH also drives autism research to enhance the understanding of autism cases and improve the available treatment methods, including genetic research to identify various genetic factors and mutations associated with autism spectrum disorder.

This conference is a unique opportunity for learning and exchanging experiences, and benefiting from each other's experiences to improve the quality of life for people of determination. It represents a scientific advancement and a valuable addition that reflects the vision of our UAE wise leadership. We look forward to more efforts and cooperation for pioneering creative achievements to achieve a bright future.

"Together, we can make a difference."

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

سعـــادة / أمـــانـــي الهـــاشـــمي

مدير عام المواهب الحكومية بالإنابة

Her Excellency. AMANI AL HASHEMI

Government Talent Director General Acting

إنَّ الرعاية الكريمة لسمو الشيخ خالد بن زايد آل نهيان - رئيس مجلس إدارة مؤسسة زايد العليا لأصحاب الهمم لهذا المؤتمر الدولي تؤكد الدور الرائد لدولة الإمارات العربية المتحدة على الصعيد المحلي والعالمي، في التوعية باضطرابات التوحد، والذي يدعم كافة الجهود للتعريف بهم وبحقوقهم عبر إطلاق العديد من المبادرات الوطنية التي تسهم في تحقيق هذه الأهداف الإنسانية النبيلة لأبنائنا من ذوي التوحد.

في إطار قيادة ورؤية حكيمة من سمو الشيخ خالد بن محمد بن زايد آل نهيان، ولي عهد أبوظبي، رئيس المجلس التنفيذي لإمارة أبوظبي، تسعى دائرة التمكين الحكومي إلى إطلاق المشاريع والمبادرات التي تدعم هذه الفئة الغالية على قلوبنا جميعًا، لتمكين دمجهم بشكل كامل وإيجابي والاستفادة من قدراتهم المتميزة للمساهمة في بناء المجتمع ورفعته، حيث بادرت الدائرة بتطبيق سياسة التوظيف الدامج، استكمالاً لجهودها في تعزيز خدمات التوظيف المخصصة لأصحاب الهمم، كما قدمت الدائرة الإرشاد والوعي المعرفي لتمكين الجهات الحكومية من تعديل البيئة المادية والاجتماعية، بما يتناسب مع متطلبات هذه الفئة الغالية لتهيئة بيئة عمل صديقة وإيجابية لهم. وها نحن اليوم نشهد معًا أعمال المؤتمر الدولي في أبحاث التوحد في دورته الثانية عشر على التوالي، حيث نسعى إلى أن يكون هذا المؤتمر فرصة حقيقية لتضافر الجهود في تطبيق نهج متكامل يعمل على دمج أصحاب الهمم، وتسخير كافة الإمكانات للكشف المبكر عن الأطفال المصابين باضطرابات طيف التوحد، حتى نتمكن من التدخل المبكر ودمجهم في نظام التعليم الجديد بما ينعكس بشكلٍ إيجابي على نمو الطفل الصحي والمعرفي، وتأهيله للمشاركة في عملية التنمية المجتمعية الشاملة.

" معا يمكننا إحداث الفرق"

The generous patronage of His Highness Sheikh Khalid bin Zayed Al Nahyan, Chairman of the Board of Directors of the Foundation, for this international conference confirms the leading role of the United Arab Emirates, locally and globally, in raising awareness of autism disorders, which supports all efforts to introduce them and their rights by endorsing many national initiatives that contribute to achieving these noble humanitarian goals for our children with autism.

In line with the vision of His Highness Sheikh Khalid bin Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Chairman of the Abu Dhabi Executive Council, the Department of Government Enablement seeks to launch projects and initiatives that support this group dear to all our hearts, to enable their full and positive integration and benefit from their distinguished capabilities. These efforts will contribute to building and raising society, as the department took the initiative to implement the inclusive employment policy, in continuation of its efforts to push employment services dedicated to people of determination. The department also provides guidance and cognitive awareness to enable entities to modify the physical and social environment, in line with the requirements of this dear group to create a friendly and positive work environment for them. Today, we are witnessing together the work of the 12th International Conference on Autism Research, which represents a real opportunity to collaborate in integrating people of determination, and harnessing all possible capabilities for early detection of children with autism spectrum disorders, so that we can intervene early and integrate them into the new education system. This approach will positively reflect on the child's healthy growth and qualify him to participate in the community development process.

"Together, we can make a difference."

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

AT A GLANCE

Aim Of the Conference

About of the Conference:

- International research and practice conference Autism. Challenges and Solutions» covers a broad set of issues related to autism and autism spectrum disorders (ASD). The conference is envisioned not only as an experience sharing event, but also as an attempt to deal with a serious medical and social problem which is not getting its fair share of attention in most countries.
- The educational goal of the conference is to pull autism out of the shadows. This creates an opportunity to introduce recent advances in protocols and methods into clinical practice and to encourage research to solve various problems of autism.
- Over 10 years of work the conference "Autism. Challenges and Solutions" laid the foundation for major changes in the field of professional care for people with autism. It launched an extremely significant discourses on autism, responding to current trends in scientific research and reflecting the re-conceptualization of autism as a phenomenon and as a diagnosis in the 21st century.
- During the conference, the latest skills and experiences in the field of developing modern methods of treating autism disorder will be reviewed within dialogue sessions, discussions, scientific research and visual presentations that include solutions and developmental ideas with the participation of a large number of doctors researchers and specialized experts from international academics in this field.

The conference will be accompanied by practical training workshops starting from the date of April 2023 ,27 by international trainers and a media campaign on the media and social networking sites to support children with autism through.

Conference Goals:

1. Present the front-rank knowledge in theory and practice of autism treatment to the international community, speed up the dissemination of new, effective and safe measures, both medical and educational, to help people with autism.

2. Show the results of the pilot stage of a unique experimental project for education of autistic children based on an innovative model of inclusive education for children with special cognitive needs, making use of the best international practices and state-of-the-art research

3. Discuss the ways and approaches for implementing some of these results into international practice.

4. Demonstrate innovative research and achievements in biomedicine that may help fulfill various needs in autism.

5. Fulfill a powerful educational mission through massive participation in the conference and broad media outreach.

6. Form working groups for implementation of international projects in research and clinical practice.

7. Set a starting point for biomedicine development in search of autism clinical diagnostic methods and ASD intervention approaches.

Countries of participants:

- Algeria
- Canada
- China
- Egypt
- France
- Germany
- India
- Ireland
- Italy
- Jordan
- Saudi Arabia
- Lebanon
- Oman
- Qatar
- Russia
- Serbia
- United Arab Emirates
- United Kingdom
- United States of America

LIST OF COMMITTEES

Higher Committee

CHAIR OF HIGHER COMMITTEE:

- **H.E. Abdullah Al-Humaidan**

Chairman of Higher Committee, Secretary General of the Zayed Higher Organization for People of Determination

- **Amina Al Haidan**

Co-Chairperson of Higher Committee, Founder & Chairperson Lotus Holistic Institute, Abu Dhabi, United Arab Emirates.

HIGHER COMMITTEE:

- **Abdul Hamid Najib Abdul Hay**

Media & Publishing Advisory

- **Afaf El-Ansary**

Member in Autism Research and Treatment Center, KSA and Scientific Consultant of Autism Center, Lotus Holistic Medical Center in Abu Dhabi (Egypt, Saudi Arabia, UAE)

- **Ekaterina Men**

President of the Autism Challenge Center, Member of the Expert Council on organizing the education of persons with ASD under the Ministry of Education of the Russian Federation, psychologist, content director of the Organizing Committee (Russia)

- **Stephen Edelson**

Executive Director of the Autism Research Institute (USA)

- **Ghuwaya Al Neyadi M.D**

Senior Vice President
Group Medical & Wellbeing,
Abu Dhabi National Oil Company.

Organizing Committee

CHAIR OF ORGANIZERS:

H.E. Abdullah Al-Humaidan

Secretary General of the Zayed Higher Organization for People of Determination

ORGANIZING COMMITTEE:

- **Amina Al Haidan**

Co-Chairperson of Higher Committee
Founder & Chairperson Lotus Holistic Institute, Abu Dhabi, United Arab Emirates.

- **Khalood Abdulraheem Almohammed**

Director of Care and Rehabilitation Centers Department Zayed Higher Organization for People of Determination, Abu Dhabi, United Arab Emirates

- **Mouza alsalami**

Director of alain autism center, Zayed Higher Organization for People of Determination, Abu Dhabi, United Arab Emirates.

- **Aysha almansori**

Director of abu dhabi autism center, Department Zayed Higher Organization for People of Determination, Abu Dhabi, United Arab Emirates.

- **Reem almazroui**

Manager of Zayed City Center for Care and Rehabilitation, Department Zayed Higher Organization for People of Determination, Abu Dhabi, United Arab Emirates

- **Ekaterina Men**

President of the Autism Challenge Center, Member of the Expert Council on organizing the education of persons with ASD under the Ministry of Education of the Russian Federation, psychologist, content director of the Organizing Committee (Russia).

- **Dilyara Muzafarova**

Executive Director of the Autism Challenge Center (Moscow Russia).

- **Alka Kalra**

Psychologist, trainer, founder of Eduscan Institute; international certification and accreditation by the Academy of Orton Gillingham Practitioners & Educators; a licensed Parenting expert from Feeling Mind.

Organizing Committee

- **Muneera Alhababi**

Head of Social & psychological care section, Zayed Higher Organization for People of Determination.

- **Ghadeer Alateibi**

Senior Social Specialist, Zayed Higher Organization for People of Determination.

- **Nasreen Badreldin**

Supervisor, office work. ADNOC

- **Mariam Salem Al Suwaidi**

General Secretarys Office Manager of the Zayed Higher Organization for People of Determination.

- **Mariam Mohammed AlMansouri**

Correspondence administrator of the Zayed Higher Organization for People of Determination.

- **Julia Fokina**

Secretary, the Autism Challenge Center (Moscow, Russia)

- **Tatyana Scripko**

Analyst, liaison officer

- **Valentina Minakova**

Coordinator, behavioral consultant, the Autism Challenge Center (Moscow, Russia).

- **Svetlana Halilova**

Secretary, the Autism Challenge Center (Moscow, Russia)

LIST OF COMMITTEES

Scientific Committee

CHAIR OF SCIENTIFIC COMMITTEE:

- **Prof. Afaf El-Ansary, Ph.D.**

Member in Autism Research and Treatment Center, KSA and Scientific Consultant of Autism Center, Lotus Holistic Medical Center in Abu Dhabi (Egypt, Saudi Arabia, UAE)

Scientific Committee

- **Andreas M. Grabrucker Ph.D**

Associate Professor and lead of the Bio Materials Research Cluster in Bemal Institute of University of Limerick (Ireland)

- **Ghuwaya Al Neyadi M.D**

Senior Vice President
Group Medical & Wellbeing,
Abu Dhabi National Oil Company.

- **James Adams Ph.D**

Professor, Director of the Autism/Asperger's Research Program at Arizona State University, President of the Autism Society of Greater Phoenix (USA).

- **Dr. Omar Alhammadi**

Internal medicine consultant

- **Abdulla Alawadhi, PhD, CBDT**

Licensed consult pediatric neurologist, Al Jalila Children's Specialty Hospital (UAE)

- **Maha Helali, MA**

Special & Inclusive Ed., Technical Advisor to Minister of Social Solidarity on Disability & Rehabilitation Affairs (Egypt).

- **Dr. Amina Rashed Ahmed Al Mashroodi**

Consultant Family Physician.

- **Dr. Talat Alwazna, MSc**

Neurology, Secretary General Academy of Special Education Autism Charity in Saudi.

- **Dr. Nahida Nayaz Ahmed, MBBS, CPE**

Chief Medical Officer- Sakina: SEHA Mental Health Services.

- **Laila Al-Ayadhi Ph.D**

Professor and Consultant of Neurophysiology, Director of KSU Autism Research and Treatment Center, Department of Physiology, Faculty of Medicine, King Saud University (Saudi Arabia)

- **Nagwa Abdul Meguid Ph.D**

Professor of Human Genetics, Head of the DNA Research Laboratory in Genetic Behavioral Disorders, Founder of the Autism Research Study Group (Egypt).

- **Naila Rabbani Ph.D**

Professor of Basic Medical Science at College
of Medicine, Head of Proteomics at QU health, Qatar University (Qatar).

Media Committee

CHAIR OF MEDIA COMMITTEE:

- **Abdul Hamid Najib Abdul Hay**

Media & Publishing Advisory

MEDIA COMMITTEE:

- **Nawal Ali Al Shamsi**

Communication and Marketing Office
Director of Communication and Marketing Office

- **Sonitta Nader**

Media presenter, TV et Radio host , and presenter of programs: Sustainable Health, assiha al mostadama on Radio Monte Carlo International and Health First, assiha awalan , on France 24.

- **Amr Fouad Hegazy**

IT Department Manager

- **Rashad Abdo Mohammed**

Graphic Designer

- **Mohamed Rashid**

Digital Marketing Executive

Outcomes and Recommendations

Over the course of four days, the Autism Conference titled "Challenges and Solutions" was enriched with valuable lectures by a distinguished group of researchers. They presented the latest advancements in their studies and scientific experiments, making their findings accessible to specialists, practitioners, therapists, and parents dealing with individuals on the autism spectrum worldwide. This year's conference highlighted key outcomes, expectations, and contributions published and discussed through practical workshops attended positively by parents.

The conference successfully established strong relationships with relevant authorities, official entities, and international specialized centers. These institutions expressed their desire to continue collaborating with the conference's executive committee, particularly on new scientific research. They also showed interest in contributing to the Autism Journal, which was launched during the conference.

Recommendations:

- **1.** Prioritize advancing scientific research related to the biomarkers of autism spectrum disorder (ASD) at the highest international level to achieve accreditation for research outcomes.
- **2.** Promote the importance of a balanced and healthy diet during pregnancy and the early years, avoiding cesarean sections unless absolutely necessary.
- **3.** Strive to establish a laboratory for conducting medical analyses based on scientifically validated biomarkers that have been published in high-impact scientific journals.
- **4.** Emphasize academic collaboration among all relevant colleges to document and exchange expertise and information on the latest research developments related to autism spectrum disorder (ASD).
- **5.** Endeavor to form research groups comprising various specialists interested in international collaboration on autism research and create teams with diverse and complementary specialties.
- **6.** Enhance the use of artificial intelligence in educating children with autism as a means for both diagnosis and learning.
- **7.** Work towards activating educational institutions to integrate children with ASD with their peers in schools.
- **8.** Focus on the social protection of children with autism, and guide students on how to interact with this group.
- **9.** Seek to provide suitable employment opportunities for students with autism to demonstrate their capabilities, in line with the requirements of the labor market.
- **10.** Encourage talents and hobbies and promote the work of distinguished individuals in various scientific, educational, sports, and artistic fields.
- **11.** Conduct a comprehensive survey to document autism cases at the national level and identify multiple cases for use in studies and research.
- **12.** Intensify awareness programs for all segments of society about the warning signs in newborns, educating them about the early symptoms of autism spectrum disorder (ASD).
- **13.** Organize workshops and training lectures for professionals in the field of autism on parental mental health and positive interactions with children, empowering them to understand their needs.
- **14.** Encourage educational programs across different disciplines to work with children with autism.
- **15.** implement initial screening forms in health units to identify high-risk cases of ASD and refer them for diagnosis and early intervention services. Ensure the availability of supportive staff for the educational integration of students with autism, especially accompanying teachers.
- **16.** Work on sustaining the Autism Conference "Challenges and Solutions" annually, inviting experts, scholars, specialists, practitioners, and parents, and coordinating early with relevant universities and scientific centers.

The next conference is scheduled, God willing, for the period 27-30 April 2025.

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

Together We Can Make a Difference

معـــاً يمكـــننا إحـــداث الفـــرق

XII

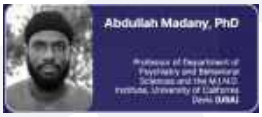

AUTISM
Autism

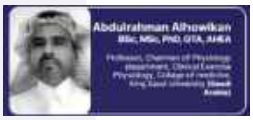

Autism
Challenges
Solutions
2024

Conference's
Speakers

Speakers


Abdulla Alawadhi, PhD, CBDT


Abdullah Madany, PhD


Abdulrahman Alhowikan

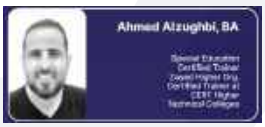

Abdullah Al-Balushi
MA ABA


Afaf El-Ansary, PhD, Professor


Aleksandra Malykhina, IBA


Alhanouf Al-Dossari

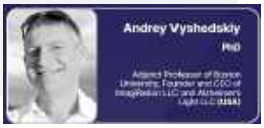

Altaf Alabdali
PhD student


Ahmed Alzughbi, BA


Amina Ather
MD, PhD

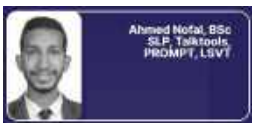

Anastasiya Semyannikova
BCBA, IBA, MS


Andreas Grabrucker
PhD


Andrey Vyshedskiy
PhD


Antonina Shangraw
BCBA-D, PhD, LBA, IBA


Ahmed Adly


Ahmed Nofal, BSc SLP, Talktools, PROMPT, LSVT


Abdullah Obeidat, BSc OT


Alhanouf Mohammed Al Dossari, PhD

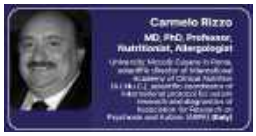

Antonio Persico
Professor


Bahij Khouzami
BAO, BCBA, IBA


Bilal Al-Shehhi
M.Sc.


Benan Farhat
BAO, BCBA, IBA


Bhismadev Chakrabarti
PhD


Carmelo Rizzo
MD, PhD, Professor, nutritionist, Allergologist


Christine DerSarkissian, BCBA, QBA & IBA,


Dr. Chafica Gharbieh
PhD Psychology


Ebtisam Murshid
BDS, MS, MPH, DrPH


Ekaterina Trifonova
PhD


Ekaterina Zhestkova
MA, MS, BCBA, IBA


Dr. Elisabetta Volpe
Professor


Ekaterina Men


Elizabeth Percy

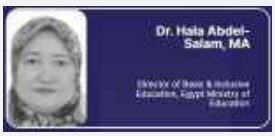

Fan Yu Lin
PhD, BCBA-D, IBA


Fatima Al-Sarayrah


Ms. Heba Hagrass, PhD


Mrs. Hadeer Ibrahim


Hanan A Alfawaz
Professor


Dr. Hala Abdel-Salam, MA


Igor Efimov
MD


Irina Kichuk
PhD

Dr. Ibtissam Mechri, PhD

Irina Nikitenkova

Jemman Ammry, BA

James Adams
MS, BCBA

Speakers


Jomah Mustafa Shoeib


Ksenia Khvostova, IBA


Kichuk Irina


Dr. Khaled Mat-Hana, PhD

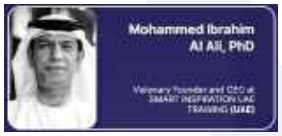

Kefah Salem Hashemi, BA


Karen Kehdy


Laila Alayadhi


Mahmoud Al-Sheyab PhD, BCBA, CAS, IBA


Maitha Al-Naimi


Mohammed Ibrahim Al Ali, PhD

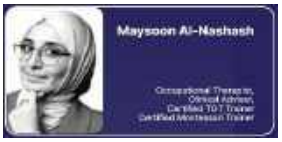

Manan Alhakbany


Maria Sudarikova MA, BCBA, RIA


Megan Miller PhD, BCBA-D, LBA


Michael Mueller PhD, BCBA-D, IBA


Dr. Mohamed El-Henawy, PhD


Maysoon Al-Nashash


Mohammed Waleed al Shamali, MBA, CN, CCN


Mahmoud Abdel Maksoud


Dr. Mohammad AL Jabery, PhD


Nadia Semiletova PhD, BCBA-D, IBA


Noraldin Al-Dori BCaBA


Nagwa Meguid MD, PhD


Naila Rabbani PhD


Natalia Gudkova MD, PhD


Natalia Ustinova MD, PhD


Nataliya Shcherbakova SLP, BCBA, IBA


Nipa Bhuptani MEd(Sp), BcaBA


Olessia Zmikhnovskaya MA, CBT


Pierre Drapeau PhD


Peter Lloyd-Thomas MEng, MBA


Rami Mosaad Abdo, BA


Rebecca Ryan M.Ed, BCBA, LBS

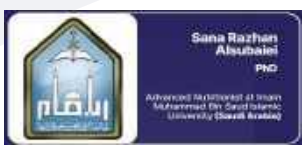

Rayaz Malik BSc Hons, MSc, MB ChB, PhD, FRCP


Rex Shangraw BCBA, LBA


Mrs. Rasha Zaki, Parent


Dr. Rehab Zaytoun MD


Shahira Abdel-Rahman, MA


Sana Razhan Alsubaiei PhD


Sarah Al-Mazidi PhD


Steve Ward MA, BCBA

Speakers


Sahar Daoud
PhD, CPDT


Steven Foster


Stephen M. Edelson
PhD


Sabbagh Ubadah
PhD


Susan D. Rich
MD, MPH, DFAPA


Salyne El Samarany


Samir A. Chaukkar
MD (Hom)


Sheikha Al Suwaidi

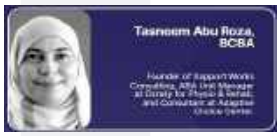

Sharifa Yateem,
BCBA,IBA, MSc.


Dr. Sayed El-Garhy, PhD


Sarah Touma


Suzan Ahmed


Dr. Talat Alwazna

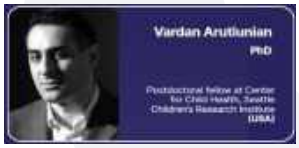

Tasneem Abu Roza,
BCBA


Teresa Grimes,
BCBA


Tracy D. Guiou
PhD, BCBA-D


Undurti Das
MD, DSc, FRSC, FAMS


Valentina Minakova


Vardan Arutiunian
PhD


Zahra Aljasmi

Conference's
Agenda

27 - 30 April, 2024.Abu-Dhabi, UAE

Conference Program

Murban Hall

Day 1. Morning, 27 Apr — Murban Hall

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Section I "Autism as the cause of discoveries"

Antonina Shangraw, BCBA-D, PhD, LBA, IBA
Clinical Director of Positive Behavioral Services of The Four Corners **(USA)**

رئيس الجلسة
د.أنتونينا شانجرو
BCBA-D، دكتوراه، LBA، IBA،
المدير الإكلينيكى للخدمات السلوكية الإيجابية في The Four Corners (الولايات المتحدة الأمريكية).

10.00 - 11.00 / Lecture

Understanding Challenging Behaviors: A Multi-Component Model Involving Behavioral Conditioning, Sensory Processing and Medical Conditions

Stephen M. Edelson, MA, PhD
Director of the Autism Research Institute **(USA)**

ستيفن إيدلسون
ماجستير ودكتوراه، مدير معهد أبحاث التوحد الولايات المتحدة الأمريكية

فهم السلوكيات الصعبة: نموذج متعدد المكونات يشمل التكيف السلوكي والمعالجة الحسية والحالات الطبية

11.00 - 11.30 / Lecture

The International Behavior Analysis Organization

المنظمة الدولية لتحليل السلوك

Michael Mueller PhD, BCBA-D, IBA
Founder and Executive Director of International Behavior Analysis Organization **(USA)**

د. مايكل م. مولر
دكتوراه، D-BCBA، IBA المدير التنفيذي للمنظمة الدولية لتحليل السلوك (الولايات المتحدة الأمريكية)

12.00 - 13.00

Grand Opening

Day 1. Afternoon,27 Apr — Murban Hall

Chairperson

Section II “Autism in the laboratory and in life”

Dr.Omar Alhammadi
Internal medicine consultant

رئيس الجلسة
د.عمر الحمادي
استشاري أمراض باطنية

14.00 - 15.00 / Lecture

Validation of plasma protein glycation and oxidation biomarkers for the diagnosis of autism

Dr. Naila Rabbani, PhD
Professor of Basic Medical Sciences and Head of Proteomics, AGEomics and Diabetes Research Group, Qatar University (UK, Qatar)

التحقق من صحة بروتين البلازما والمؤشرات الحيوية للأكسدة لتشخيص اضطراب طيف التوحد

بروفيسور / نائله ربانى
أستاذ العلوم الطبية الأساسية، جامعة قطر

15.00 - 16.00 / Lecture

Zinc Deficiency and Autism – From cellular mechanisms to clinical studies – an update

Andreas Grabrucker, PhD
Associate Professor and the Lead of the Bio Materials Research Cluster in Bernal Institute of University of Limerick (Ireland)

نقص الزنك والتوحد من الآليات الخلوية إلى الدراسات السريرية – تحديث

دكتور/ أندرياز جرابروكر
مختبر البيولوجيا العصبية الخلوية وتكنولوجيا النانو العصبية، قسم العلوم البيولوجية ، معهد برنال ، معهد البحوث الصحية ، جامعة ليمريك، أيرلندا

16.00 - 17.00 / Lecture

Phenotypes and mechanisms: Probing autism in and outside the lab

Bhismadev Chakrabarti, PhD
Professor of Neuroscience and Mental Health, and Research Director of the Centre for Autism at the School of Psychology and Clinical Language Sciences, University of Reading (UK)

الأنماط الظاهرية وآليات التحقق في التوحد داخل وخارج المختبر

بروفيسور/ بيزماديف شاكرابارتى
أستاذ علم الأعصاب والصحة العقلية، مدير الأبحاث لمركز التوحد في كلية علم الامراض النفسية وعلوم اللغة السريرية، جامعة ريدينغ

17.00 - 17.30 / Lecture

Trace elements and minerals in autism spectrum disorder theranostics

Anatoly V. Skalny, MD, PhD, DSc
Prof. Director of Center for Bioelementology and Human Ecology of Sechenov University; Chief researcher at the World-Class Research Center “Digital Biodesign and Personalized Healthcare” of Sechenov University, Moscow, Russia

العناصر النادرة والمعادن في اضطراب طيف التوحد العلاجي

بروفيسور أناتولي في سكالني
دكتوراه في الطب والعلوم، مدير مركز علم العناصر النادرة والبيئة البشرية بجامعة سيتشينوف؛ كبير الباحثين في مركز الأبحاث العالمي "الرقمي" - التصميم الحيوي والرعاية الصحية الشخصية" لـ سيتشينوف

Day 2. Morning, 28 Apr

Murban Hall

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Section V: **“Biomarkers and signals”**

Khaled Nabil Kadry, MD, PG, MRCPsych, MBBch

Child and Adolescent Psychiatry Chair of Strong Minds Global Faculty Advisory Panel, Special Olympics..

رئيس الجلسة
دكتور خالد نبيل قدري
بكالوريوس الطب والجراحة، FRCpsych MD رئيس الطب النفسي للأطفال والمراهقين للجنة الاستشارية العالمية لأعضاء هيئة التدريس في شركة Strong Minds، الأولمبياد الخاص

10.00 - 11.00 / Lecture

GABA and Glutamate Imbalance in Autism and Their Reversal as Novel Hypothesis for Effective Treatment Strategy: An update

اختلال توازن الجابا والجلوتامات في التوحد وعكسهما كفرضية جديدة لاستراتيجية العلاج الفعالة: تحديث

Afaf El-Ansary, PhD

Professor, Member in Autism Research and Treatment Center, KSA, Scientific Consultant of Autism Center, Lotus Holistic Medical Center in Abu Dhabi, in the recent past senior scientist at King Saud University **(Egypt, Saudi Arabia, UAE).**

بروفيسور / عفاف الأنصارى
أستاذ وعضو مركز أبحاث وعلاج التوحد بالمملكة العربية السعودية.
المستشار العلمي لمركز التوحد، مركز لوتس الطبي الشامل، الإمارات العربية المتحدة

11.00 - 11.30 / Lecture

Comparative clinical and experimental study on novel biomarkers related to the effectiveness of GABA supplementation as intervention strategy in autism

دراسة سريرية وتجريبية مقارنة على المؤشرات الحيوية الجديدة المتعلقة بفعالية مكملات GABA كاستراتيجية تدخل في التوحد

Altaf Nayil Alabdali

PhD student (Clinical biochemistry), King Saud University **(Saudi Arabia)**

ألطاف نايل العبدلي
دكتوراه (الكيمياء الحيوية السريرية)، جامعة الملك سعود (المملكة العربية السعودية).

11.30 - 12.00 / Lecture

CTRP3 as a novel biomarker in the plasma of Saudi children with autism

CTRP3 كمؤشر حيوي جديد في بلازما الأطفال السعوديين ذوي التوحد

Manan Alhakbany, PhD

Associate professor of physiology at college of Medicine, King Saud University **(Saudi Arabia)**

د/ منان الحقباني
دكتوراه، أستاذ مشارك في علم وظائف الأعضاء في كلية الطب، جامعة الملك سعود (المملكة العربية السعودية)

12.30 - 13.00 / Lecture

Why do we understand so little about the causes of Autism?

لماذا لا نفهم إلا القليل عن أسباب التوحد؟

Paul Shattock

Chairman of ESPA, a charity which provides a wide range of services for adults and of ESPA Research which concentrates on biomedical approaches to Autism. Former Secretary of Autism-Europe and ex-President of World Autism Organization.

بول شاتوك
رئيس ESPA، وهي مؤسسة خيرية تقدم مجموعة واسعة من الخدمات للبالغين ورئيس أبحاث ESPA التي تركز على الأساليب الطبية الحيوية لعلاج التوحد.
السكرتير السابق للتوحد-أوروبا والرئيس السابق للمنظمة العالمية للتوحد.

Day 2. Afternoon, 28 Apr

Murban Hall

Chairperson

Section VII: **Autism: Genetic Clues”**

Dr. Nahida Nayaz Ahmed, MBBS, CPE

Chief Medical Officer- Sakina: SEHA Mental Health Services.

رئيس الجلسة
دكتورة/ ناهدة نياز احمد
المدير الطبي التنفيذي لسكينة بشركة صحة.

14.00 - 15.00 / Lecture

Identification and characterisation of genes involved in common developmental brain diseases

تحديد وتوصيف الجينات المشاركة في أمراض الدماغ النمائية الشائعة

Pierre Drapeau, PhD

Chair of Pathology and Cell biology, Professor of neuroscience, Montreal Neurological Institute, McGill University, Montreal **(Canada)**

دكتور/ بيير درابيو
رئيس قسم علم الأمراض وبيولوجيا الخلية وأستاذً علم الأعصاب جامعة مكغيل. مونتريال، كندا، و أستاذ كرسي أبحاث علم الأعصاب (كندا)

15.00 - 16.00 / Lecture

Gamma-band neural activity and its relation to language skills and core symptoms of Autism Spectrum Disorder

النشاط العصبي لنطاق جاما وعلاقته بالمهارات اللغوية والأعراض الأساسية لاضطراب طيف التوحد

Vardan Arutiunian, PhD

Postdoctoral fellow at Center for Child Health, Seattle Children’s Research Institute (Russia|USA)

فاردان أروتيونيان
دكتوراه. زميل ما بعد الدكتوراه في مركز صحة الطفل، معهد سياتل لأبحاث الأطفال (الولايات المتحدة الأمريكية)

16.00 - 16.30 / Lecture

The diagnostic algorithm for children developmental disorders - the practical application within the framework of modern capabilities

الخوارزمية التشخيصية لاضطرابات النمو لدى الأطفال – التطبيق العملي في إطار الإمكانيات الحديثة

Natalia S. Gudkova, PhD, MD

Pediatric neurologist, medical expert of the Chromolab laboratory (Russia)

ناتاليا جودكوفا
ماجستير، دكتوراه. طبيب أعصاب الأطفال، قسم أمراض الأعصاب وجراحة الأعصاب للأطفال في SZGMU I.I. متشنيكوف، دكتور في الطب الوقائي في معهد الوقاية (روسيا)

16.30 - 17.30 / Lecture

Developing effective therapeutics for Autism Spectrum Disorder

تطوير علاجات فعالة لاضطراب طيف التوحد

Ubadah Sabbagh, PhD

McGovern Institute for Brain Research, MIT Department of Brain and CognitiveSciences, MITStanley Center for Psychiatric Research, Broad Institute of MIT and Harvard (UAE/USA)

عبادة صباغ
دكتوراه، معهد ماكغفرن لأبحاث الدماغ، قسم الدماغ والعلوم المعرفية بمعهد ماساتشوستس للتكنولوجيا، مركز ستانلي لأبحاث الطب النفسي بمعهد ماساتشوستس للتكنولوجيا، المعهد العريض التابع لمعهد ماساتشوستس للتكنولوجيا وجامعة هارفارد (الإمارات العربية المتحدة، الولايات المتحدة الأمريكية)

Day 3. Morning, 29 Apr

Murban Hall

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Section IX: Lipids and more in ASD

Dr. Sameer B. Awadalla
MBBCh, MSc, MRCpsych

Consultant child and adolescent psychiatrist for the AHS in Al Mushrif and Al Towayyia Specialist Paediatric Centres **(UAE|UK)**

رئيس الجلسة
د. سمير عوض الله
استشاري الطب النفسي للأطفال والمراهقين في الخدمات العلاجية الخارجية في المشرف ومركز الطوية التخصصي لطب الأطفال (الإمارات العربية المتحدة|المملكة المتحدة)

10.00 - 11.00 / Lecture

Omega-3 fatty acid supplementation in autism spectrum disorder is there a benefit: An unanswered question? we can answer together

مكملات الأحماض الدهنية أوميغا 3 في اضطراب طيف التوحد هل هناك فائدة؟ سؤال يحتاج إجابة؟ يمكننا الإجابة معا

Hanan A Alfawaz
MSc, PhD

Professor of Nutrition & Metabolism; Food Science & Nutrition Department at King Saud University Riyadh (Saudi Arabia)

بروفيسور حنان الفواز
أستاذ التغذية والتمثيل الغذائي، قسم علوم الأغذية والتغذية، كلية علوم الأغذية والزراعة، جامعة الملك سعود، الرياض، المملكة العربية السعودية

11.00 - 12.00 / Lecture

Bioactive lipids in the prevention and management of autism

بيولوجيا الدهون النشطة في الوقاية من وعلاج التوحد

Dr. Undurti N. Das
MD, FAMS, FRSC, FICP

President and Founder of UND Life Sciences **(India)**

أندورتي ن.داس
أخصائي المناعة السريرية و الروماتيزم، الرئيس التنفيذي ومسؤول منظمات المجتمع المدني في علوم الحياة، رئيس تحرير مجلة "الدهون في الصحة والمرض"

12.00 - 12.30 / Lecture

It's not only a social problem. Nutritionists, family, school and therapists: a powerful synergy

إنها ليست مشكلة اجتماعية فقط. خبراء التغذية والأسرة والمدرسة والمعالجين: تآزر قوي

Carmello Rizzo, MD PhD

Professor, University Niccolò Cusano in Rome, Scientific director of International Academy of Clinical Nutrition (A.I.Nu.C.), (Italy)

كارميلو ريزو
دكتوراه في الطب، أستاذ، أخصائي تغذية، أخصائي أمراض الحساسية، جامعة نيكولو كوزانو في روما، المدير العلمي للأكاديمية الدولية للتغذية السريرية (A.I.Nu.C.)، (إيطاليا)

12.30 - 13.00 / Lecture

The Healthy Baby Roadmap: An Actionable Strategy for Reducing the Risk of Chronic Illness in Children Starts with Preconception and Pregnancy

خارطة طريق الطفل السليم: استراتيجية قابلة للتنفيذ للحد من مخاطر الإصابة بالأمراض المزمنة لدى الأطفال تبدأ بمرحلة ما قبل الحمل والحمل

Vicki Kobliner

Registered Dietitian/Nutritionist/ Pediatric And Adult Functional Medicine Dietitian, owner of Holcare Nutrition **(USA)**

فيكي كوبلينر
اخصائي تغذية في الطب الوظيفي للأطفال والكبار، مالك شركة Holcare Nutrition
(الولايات المتحدة الأمريكية)

Day 3. Afternoon, 29 Apr — Murban Hall

Chairperson

Section XI: **Nutrition determines behavior**

Dr. Amina Rashed Ahmed Al Mashroodi
Consultant Family Physician.

رئيس الجلسة
الدكتورة آمنة راشد أحمد المرشودي
استشاري طب الأسرة.

14.00 - 15.00 / Lecture

Precision microbial intervention improves social behavior in autistic children

تحسين السلوك الاجتماعي لدى الأطفال ذوي التوحد باستخدام التدخل الميكروبي الدقيق

Elisabetta Volpe, PhD

Director of Molecular Neuroimmunology Laboratory of Santa Lucia Foundation in Rome **(Italy)**

دكتورة / إليزابيتا فولب
باحث ما بعد الدكتوراه في علوم المناعة ,معهد كوري
(باريس، فرنسا)

15.00 - 17.30 / Workshop

Intensive Behavioral Feeding Intervention, Nutritional Support and Collaboration

التدخل في سلوك التغذية المكثفة والدعم الغذائي

Kelly McCracken Barnhill, MBA, CN, CCN
Clinical Nutritionist, Clinical Director at The Johnson Center for Child Health and Development **(USA)**

كيلي مكراكن بارنهيل
ماجستير في إدارة الأعمال، CN، CCN،
أخصائي التغذية السريرية.
المدير السريري في مركز جونسون لصحة الطفل ونموه (الولايات المتحدة الأمريكية)

Rebecca M. Ryan, M.Ed., BCBA, IBA
Executive director at Behavioral Consulting Sandbox ABA Austin **(USA)**

ريبيكا م. رايان
ماجستير التربية، IBA، BCBA.
المدير التنفيذي
لشركة Behavioral Consulting Sandbox ABA Austin (الولايات المتحدة الأمريكية)

Day 4. Morning, 30 Apr

Murban Hall

Registration Registration Registration Registration Registration Registration

Chairperson

Section XIII: **Syndrome: from label to understanding**

Pierre Drapeau, PhD

Chair of Pathology and Cell biology, Professor of neuroscience, Montreal Neurological Institute, McGill University, Montreal **(Canada)**

رئيس الجلسة
د.بيير درابو
رئيس قسم علم الأمراض وبيولوجيا الخلية،
أستاذ علم الأعصاب، معهد مونتريال للأعصاب،
جامعة ماكجيل، مونتريال(كندا).

10.00 - 11.00 / Lecture

Corneal confocal microscopy demonstrates corneal nerve loss in children with autism spectrum disorder

يوضح الفحص المجهري متحد البؤر للقرنية فقدان عصب القرنية لدى الأطفال المصابين باضطراب طيف التوحد

Rayaz A Malik, BSc (Hons), MSc, MB ChB, PhD, FRCP

Assistant Dean for Clinical Research at Weill Cornell Medicine, Senior Consultant Physician at Hamad General Hospital (Qatar), Honorary Professor of Medicine at the University of Manchester and visiting Professor of Medicine at Manchester Metropolitan University **(UK)**

الدكتور رياز مالك
بكالوريوس (مع مرتبة الشرف)، ماجستير، بكالوريوس الطب والجراحة، دكتوراه، FRCP، أستاذ الطب ومساعد العميد للأبحاث السريرية في وايل كورنيل للطب، طبيب استشاري أول في مستشفى حمد العام (قطر)، أستاذ فخري للطب في جامعة مانشستر وزائر زائر أستاذ الطب بجامعة مانشستر متروبوليتان (المملكة المتحدة)

11.00 - 12.00 / Lecture

Fragile X syndrome and Autism Spectrum Disorder: Is ASD in FXS 'true' ASD?

متلازمة كروموزوم اكس الهش واضطراب طيف التوحد: هل التوحد لدى كروموزوم اكس الهش حقيقي؟

Nagwa Meguid, MD, PhD

Professor of Human Genetics of the National Research Center, Head of the CONEM Egypt Child Brain Research Council for Nutritional and Environmental Medicine (Egypt)

بروفيسور نجوى عبد المجيد محمد
أستاذ علم الوراثة البشرية، المركز القومى للبحوث, رئيس جمعية بحوث الطب الغذائي والبيئي لأمراض الدماغ فى الأطفال (مصر-النرويج)، حائزة على جائزة اليونسكو/ لوريال، رئيسة لجنة التحكيم ,منظمة اليونسكو للمرأة في العلوم.

12.00 - 13.00 / Lecture

Diet change and microglia ablation of MeCP2e1 deficient mice affect the Rett-like disease symptoms in a sex-dependent manner.

تأثير تغيير النظام الغذائي واستئصال الخلايا الدبقية الصغيرة لدى الفئران على أعراض مرض شبيه ريت بطريقة تعتمد على الجنس

Abdullah M Madany, PhD

Psychiatry and Behavioral Sciences and the M.I.N.D. Institute, University of California Davis **(USA)**

دكتور عبد الله محمد مدنى
باحث ما بعد الدكتوراه، كلية الطب بجامعة كاليفورنيا - ديفيس، علوم الأحياء الطبية والمناعة الدقيقة

Day 4. Afternoon, 30 Apr — Murban Hall

Section XV: **Molecular biological pathways of autism**

Chairperson

Afaf El-Ansary, Professor

Member in Autism Research and Treatment Center, KSA, Scientific Consultant of Autism Center, Lotus Holistic Medical Center in Abu Dhabi, in the recent past senior scientist at King Saud University **(Egypt, Saudi Arabia, UAE)**

رئيس الجلسة
بروفيسور/ عفاف الأنصاري
أستاذ، عضو مركز أبحاث وعلاج التوحد، المملكة العربية السعودية. المستشار العلمي لمركز التوحد، مركز لوتس الطبي الشامل، الإمارات العربية المتحدة.

14.00 - 15.00 / Lecture

Autoimmunity in ASD

المناعة الذاتية في اضطراب طيف التوحد

Laila Y Alayadhi, PhD

Professor and Consultant of Clinical Neurophysiology, Faculty of Medicine, King Saud University, King Khaled University Hospital (KKUH) and King Abdul Aziz University Hospital (KAUH), Riyadh **(Saudi Arabia)**

بروفيسور/ ليلى العياضى
أستاذ واستشاري الفسيولوجيا العصبية السريرية. كلية الطب جامعة الملك سعود

15.00 - 16.00 / Lecture

Genetic and pathogenic overlaps between autism and Alzheimer's disease: opportunities for drug repurposing

التداخلات الوراثية والمسببة للأمراض بين طيف التوحد والزهايمر: فرص إعادة استخدام الأدوية

Ekaterina Trifonova, PhD

Researcher at Federal Research Center Institute of Cytology and Genetics SB RAS **(Russia)**

ايكاترينا تريفونوفا
دكتوراه.باحثة في معهد مركز الأبحاث الفيدرالي لعلم الخلايا وعلم الوراثة SB RAS (روسيا)

16.00 - 16.30 **Conference closing and resolution announcement**

16.30 - 17.30 / Lecture

The possible role of sodium leakage channel localization factor-1 in the pathophysiology and severity of autism spectrum disorders

الدور المحتمل لعامل توطين قناة تسرب الصوديوم في الفسيولوجيا المرضية وشدة اضطراب طيف التوحد

Sarah H Al-Mazidi, PhD

Senior specialist in neurophysiology and assistant professor of physiology at college of medicine, Imam Mohammed bin Saud University **(Saudi Arabia)**

دكتورة سارة المزيدى
أخصائي أول الفسيولوجيا العصبية وأستاذ مساعد بكلية الطب، جامعة الإمام محمد بن سعود، الرياض، المملكة العربية السعودية

17.30 - 18.00 / Lecture

Autism and Gut and Psychology /Physiology syndrome

التوحد والأمعاء وعلم النفس / متلازمة وظائف الأعضاء

Dr. Dena Rihan, MD, MSc

Psychiatrist, Gut and Psychology/ Physiology Syndrome (GAPS) Certified Practitioner, Child Mental Health and Special Needs Specialist **(Egypt)**

دكتورة دينا ريحان
دكتوراه في الطب، ماجستير في علم الأمعاء وعلم النفس/ متلازمة الفسيولوجيا (GAPS)، أخصائية الصحة العقلية للأطفال والاحتياجات الخاصة (مصر)

27 - 30 April, 2024.Abu-Dhabi, UAE

Conference Program
Al-Gurm Hall

Day 1. Morning, 27 Apr

Al-Gurm Hall

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Section III: Profession - behavior analyst

Dr. Saher Al-Sabbah

Fatima College of Health Sciences **(UAE)**

رئيس الجلسة
د. ساهر الصباح
كلية فاطمة للعلوم الصحية (الإمارات العربية المتحدة)

10.00 - 11.00 / Lecture

The Heart of Service Delivery: Creating Connected Relationships

قلب تقديم الخدمات: إنشاء علاقات مترابطة

Megan Miller, PhD, BCBA-D, LBA

Chief Clinical Officer of DoBetter Collective (USA)

د. ميغان ميلر
دكتوراه، BCBA-D، LBA الرئيس التنفيذي الإكلينيكى لمجموعة Do Better (الولايات المتحدة الأمريكية)

11.00 - 11.30 / Lecture

Engaging team members in a teamwork in a remote ABA-service

إشراك أعضاء الفريق في العمل الجماعي في خدمة (ABA) عن بعد

Maria Sudarikova, MA, BCBA, IBA

Chairman of RusABA (Association of Applied Behavior Analysis Specialists) (Russia)

ماريا سوداريكوفا
ماجستير، BCBA، IBA مؤسس مشارك ورئيس جمعية أخصائيي تحليل السلوك التطبيقي RusAB (روسيا)

12.00 - 13.00

Grand Opening

Day 1. Afternoon, 27 Apr — Al-Gurm Hall

Section IV: Challenges under instructional control

Chairperson

Dr. Nahida Nayaz Ahmed, MBBS, CPE
Chief Medical Officer- Sakina: SEHA Mental Health Services.

رئيس الجلسة
دكتورة/ ناهدة نياز احمد
المدير الطبي التنفيذي لسكينة
بشركة صحة.

14.00 - 15.00 / Lecture

The Pains and Gains of Behavior Science Dissemination and its Impact on Autism Intervention

آلام ومكاسب نشر العلوم السلوكية وأثرها على التدخل في اضطراب التوحد

Dr. Fan Yu Lin
BCBA-D, IBA
Member of The IBAO Ethical Guidelines Committee **(China)**

دكتورة/ فان يو لين
BCBA-D، IBA(الصين), IBAO عضو لجنة المبادئ التوجيهية الأخلاقية

15.00 - 16.00 / Lecture

Understanding and Preventing Suicide Risk in Autism Spectrum Disorder

فهم ومنع خطر الانتحار في اضطراب طيف التوحد

Bahij Khouzami
M.Ed , BCBA, IBA
Autism Intervention Specialists - AIS Founder **(UAE)**

بهيج خزامي
أخصائي التدخل في حالات التوحد IBAO, BCBA, IBA.
مؤسس AIS (الإمارات العربية المتحدة)

16.00 - 17.00 / Lecture

Work with self-stimulation through learning independent leisure

العمل مع التحفيز الذاتي من خلال تعلم شغل أوقات الفراغ المستقلة

Anastasiya Semyannikova
BCBA, IBA, MS
Founder of ABASCHOOL (online-school of Applied Behavior Analysis), **(Russia)**

اناستازيا سيميانيكوفا
BCBA، IBA، MS
مؤسس ABASCHOOL (روسيا)

Day 2. Morning, 28 Apr

Al-Gurm Hall

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Section VI: Behavior: functions, goals, skills

Dr. Shahira Abdel-Rahman, MA

MA Special & Inclusive Educatio, Certified Assessor CCET/UK
Special & Inclusive Education Consultant **(Riyadh)**

رئيس الجلسة
د. شهيرة عبد الرحمن
ماجستير التربية الخاصة والشاملة، مقيم معتمد CCET/المملكة المتحدة.
مستشار التعليم الخاص والشامل (الرياض)

10.00 - 11.00 / Lecture

Function-Based Treatments for Escape-Maintained Problem Behavior: A Treatment-Selection Model for Behavior Analysts

العلاجات المبنية على الوظيفة لتعديل السلوك: نموذج اختيار العلاج لمحللي السلوك

Mahmoud Al-Sheyab, BCBA, CAS, IBA

General Manager ABA-Resources
President Of JOR-ABA Multi-Centers Consultant BCBA.
Amman, **(Jordan)**

محمود الشايب
BCBA، CAS، IBA المدير العام ABA-Resources
رئيس JOR-ABA
مستشار المراكز المتعددة BCBA عمان، الأردن)

11.00 - 11.30 / Lecture

Using electronic devices to build and promote communication and social skill in teenager with autism. Practical caseH23:H24

استخدام الأجهزة الإلكترونية لبناء وتعزيز مهارات التواصل والمهارات الاجتماعية لدى المراهقين ذوي التوحد. دراسة حالة

Aleksandra Malykhina

Clinical psychologist **(Russia)**

ألكسندرا ماليخينا
عالم نفس إكلينيكي، محلل سلوك (روسيا)

11.30 - 12.00 / Lecture

Weekends out of city without parents. How we help kids and teens with autism to get ready to live in a group home

عطلات نهاية الأسبوع خارج المدينة بدون الوالدين. كيف نساعد الأطفال والمراهقين المصابين بالتوحد على الاستعداد للعيش في منزل جماعي؟

Ksenia Khvostova, IBA

Clinical director and supervisor in Social Support Center “Inclusive Molecule”, BA in school resource room project of the Charity Foundation “Art to be close”, Mentor of Inclusive Observer Project of Autism Challenge Center **(Russia)**

كسينيا خفوستوفا
مدير إكلينيكي ومشرف في مركز الدعم الاجتماعي التابع لمنظمة غير ربحية "Inclusive Molecule" (روسيا)

12.00 - 13.00 / Lecture

Some strategies for improving listener skills: a step further

بعض الاستراتيجيات لتحسين مهارات المستمع: خطوة إلى الأمام

Ekaterina Zhestkova
BCBA, IBA

Chairman of the RusABA Board, Director of the ABA-training Center “StepUp ABA” (Russia)

ايكاترينا جيستكوفا
ماجستير، BCBA، IBA. رئيس مجلس إدارة Rus ABA، مدير مركز تدريب "StepUp ABA" (روسيا)

Day 2. Afternoon, 28 Apr

Al-Gurm Hall

Chairperson

Section VIII Behavioral craftsmanship

Dr. Amina Rashed Abmed Al Marshoodi
Consultant Family Physician.

رئيس الجلسة
الدكتورة/ آمنة راشد أحمد المرشودي
استشاري طب الأسرة.

14.00 - 16.00 / Workshop

The Assessment and Treatment of Severe Challenging Behavior

تقييم وعلاج السلوك الصعب الشديد

Michael M. Mueller
PhD, BCBA-D, IBA
Executive Director of International Behavior Analysis Organization **(USA)**

مايكل م. مولر
دكتوراه، BCBA-D، IBA المدير التنفيذي للمنظمة الدولية لتحليل السلوك (الولايات المتحدة الأمريكية)

16.00 - 17.30 / Lecture

Diving dipper into error correction procedures in ABA, their pros and cons

الغوص في إجراءات تصحيح الاخطاء في ABA إيجابيتها وسلبياتها

Antonina Shangraw
BCBA-D, PhD, LBA, IBA
Clinical Director of Positive Behavioral Services of The Four Corners (USA)

د.أنتونينا شانجرو
BCBA-D، دكتوراه، LBA، IBA،
المدير الإكلينيكى للخدمات السلوكية الإيجابية في The Four Corners (الولايات المتحدة الأمريكية).

Day 3. Morning, 29 Apr

Al-Gurm Hall

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Section X: Early and with joy

Haidar Abdrabalrasol Al Abdullah
Consultant of Psychiatry (child & adolescent), at BSP of SKMC. Deputy of child psychiatry division at BSP

رئيس الجلسة
حيدر عبد الرسول العبدالله،
استشاري الطب النفسي (الأطفال والمراهقين)،
في مدينة الشيخ خليفة الطبية

10.00 - 11.00 / Lecture

Component analysis of common early learner instructional targets

تحليل مكونات الأهداف التعليمية المشتركة للمتعلم المبكر

Teresa A. Grimes
BCBA
Co-Owner of Whole Child Consulting, LLC **(USA)**

تيريزا أ. غرايمز
المالك المشارك لشركة
Whole Child Consulting, LLC
(الولايات المتحدة الأمريكية)

11.00 - 12.00 / Lecture

Fun and Learner Repertoires

ذخيرة المرح والمتعلم

Steve Ward, MA, BCBA
Co-owner of Whole Child Consulting, LLC **(USA)**

ستيف وارد
ماجستير في تحليل السلوك ومالك مشارك لشركة Whole Child Consulting, LLC
(الولايات المتحدة الأمريكية)

12.00 - 13.00 / Lecture

ABA-therapy and Early Start Denver Model. Similarities, differences, reflections

علاج ABA ونموذج دنفر للتدخل المبكر. أوجه التشابه والاختلاف والانعكاسات.

Nataliya Shcherbakova
SLP, BCBA, IBA
Director and clinical supervisor in the ABA Center "ABC" **(Russia)**

ناتاليا شيرباكوفا
SLP، BCBA، IBA
المدير الإكلينيكي
في مركز ABA "ABC" (روسيا)

Day 4. Morning, 30 Apr — Al-Gurm Hall

Registration Registration Registration Registration Registration Registration

Chairperson

Section XIV: Lifestyle is a therapy

Dr. Dena Rihan, MD, MSc
Special & Inclusive Education Certified Assessor CCET/UK
Psychiatrist, Gut and Psychology/ Physiology Syndrome (GAPS) Certified Practitioner, Child Mental Health and Special Needs Specialist **(Egypt)**

رئيس الجلسة
دكتورة/ دينا ريحان
دكتوراه في الطب، ماجستير في علم الأمعاء وعلم النفس/متلازمة الفسيولوجيا (GAPS)، أخصائية الصحة العقلية للأطفال والاحتياجات الخاصة (مصر)

10.00 - 10.30 / Lecture

Strategies for shaping sleep behavior. Analysis and presentation of cases

استراتيجيات لتشكيل سلوك النوم. تحليل وعرض الحالات

Valentina Minakova, BSc
Behavior consultant; Founder of Alvarium ABA-Center. Head of Service "Inclusive Observer", Autism Challenge Center, Moscow **(Russia)**

فالنتينا ميناكوفا
محلل سلوكي، أخصائي بارز وأمين مركز ألفاريوم (روسيا)

Violetta Shevchenko
Master of Kinesiology. Special yoga teacher and therapist, international trainer Brain Gym ®101, "On Your Mark, Get Set, Go!", "Birth - Your courage to change" **(Russia)**

فيوليتا شيفتشينكو
ماجستير في علم الحركة. مدربة يوغا

10.30 - 11.00 / Lecture

Longitudnal developmental trajectories of young autistic children: influence of culture, diet, pretend play, and various activities

مسارات النمو للأطفال المصابين بالتوحد: تأثير الثقافة، والنظام الغذائي، واللعب التمثيلي، والأنشطة المختلفة

Andrey Vyshedskiy, PhD
Adjunct Professor of Boston University, Founder and CEO of ImagiRation LLC and Alzheimer's Light LLC **(USA)**

أندريه فيشيدسكي
دكتوراه. أستاذ مساعد في جامعة بوسطن، المؤسس والرئيس التنفيذي لشركة ImagiRation LLC وAlzheimer's Light LLC (الولايات المتحدة الأمريكية)

11.30 - 12.00 / Lecture

Comparison of Sedentary Behavior and Physical Activity between Children with Autism Spectrum Disorder (ASD) and the Controls

مقارنة السلوك المستقر والنشاط البدني بين الأطفال ذوي اضطراب طيف التوحد والمجموعات الضابطة

Abdul Rahman Mohammed Alhowikan, BSc, MSc, PhD, GTA, AHEA
Professor, Chairman of Physiology department, Clinical Exercise Physiology, College of medicine, King Saud University **(Saudi Arabia)**

بروفيسور عبد الرحمن الحويكان
أستاذ – ورئيس قسم فسيولوجيا التمارين السريرية بكلية الطب جامعة الملك سعود

12.00 - 13.00 / Lecture

Best practices in sex education for autistic learners

أفضل الممارسات في التربية الجنسية للطلاب ذوي اضطراب التوحد

Amanda Tami, MA, LPC, LBA, BCBA
Psychotherapist and behavioral consultant at Johnson Center for Child Health & Development **(USA)**

أماندا تامي
.MA، LPC، LBA، BCBA معالج نفسي واستشاري سلوكي في مركز جونسون لصحة وتنمية الطفل (الولايات المتحدة الأمريكية)

Day 4. Afternoon, 30 Apr — Al-Gurm Hall

Chairperson

Section XVI: Learning with meaning

Haytham Said Shalayek, MD, PhD, MBBCh, Msc

Assistant medical director at British Center for Neurology&Psychiatry **(UAE)**

رئيس الجلسة
هيثم سعيد شلايك
المدير الطبي المساعد في المركز البريطاني لأمراض الأعصاب والطب النفسي (الإمارات العربية المتحدة)

14.00 - 15.00 / Lecture

A framework for Trauma-Informed Applied Behavioral Intervention (ABA): The competent Learner model (CML) System

Nipa Bhuptani, MEd(Sp), BCaBA

Founder and director of Applied & Behavioral Training Institute **(UAE)**

إطار عمل للتدخل السلوكي التطبيقي المستنير بالصدمات (ABA): نظام نموذج المتعلم الكفء (CML)

نيبا بوبتاني
MEd(Sp), BCaBA.
مؤسس ومدير معهد التدريب التطبيقي والسلوكي (الإمارات العربية المتحدة)

15.00 - 17.00 / Workshop

Utilizing structured long duration projects to increase motivation, adaptive functioning skills and helping build pre-vocational skills for the real world

الاستفادة من المشاريع المنظمة طويلة الأمد لزيادة التحفيز ومهارات الأداء التكيفي والمساعدة في بناء مهارات ما قبل المهنية للعالم الحقيقي

ريكس شانجرو
رئيس عيادة الصحة السلوكية لأكبر مؤسسة غير ربحية تقدم خدمات الإعاقات النمائية في ولاية ألاسكا (الولايات المتحدة الأمريكية)

Rex Shangraw, BCBA, LBA

Behavioral Health Clinic for the largest non-profit Developmental Disabilities provider in the State of Alaska (USA)

27 - 30 April, 2024.Abu-Dhabi, UAE

Conference Program

Practical Accelerator Hall

Day 1. Afternoon, 27 Apr. Practical Accelerator Hall

Chairperson

James Adams, MS, PhD

Director of the Autism/Asperger's Research Program at Arizona State University, President of the Autism Society of Greater Phoenix **(USA)**

رئيس الجلسة
دكتور/ جيمس أدامز
مدير برنامج أبحاث التوحد/أسبرجر. جامعة ولاية أريزونا
ورئيس جمعية التوحد بالولايات المتحدة الأمريكية

14.00 - 16.00 / Workshop

Correct nutrition: a fundamental therapeutic approach in any disease, autisms and mental health

التغذية الصحيحة: نهج علاجي أساسي في أي مرض واضطراب طيف التوحد والصحة العقلية

Carmelo Rizzo, MD, PhD

Professor, Nutritionist, Allergologist University Niccolò Cusano in Rome, scientific director of International Academy of Clinical Nutrition (A.I.Nu.C.), **(Italy)**

كارميلو ريزو
دكتوراه في الطب، أستاذ، أخصائي تغذية، أخصائي أمراض الحساسية، جامعة نيكولو كوزانو في روما، المدير العلمي للأكاديمية الدولية للتغذية السريرية (A.I.Nu.C.)، (إيطاليا).

16.00 - 18.00 / Workshop

GABA supplement in Autism

المكمل الغذائي جابا والتوحد

Professor. Afaf El-Ansary

Member in Autism Research and Treatment Center, KSA, Scientific Consultant of Autism Center, Lotus Holistic Medical Center in Abu Dhabi, in the recent past senior scientist at King Saud University **(Egypt, Saudi Arabia, UAE)**

بروفيسور / عفاف الأنصارى
أستاذ وعضو مركز أبحاث وعلاج التوحد بالمملكة العربية السعودية. المستشار العلمي لمركز التوحد، مركز لوتس الطبي الشامل، الإمارات العربية المتحدة

Day 2. Morning, 28 Apr. Practical Accelerator Hall

Chairperson

Bhismadev Chakrabarti, PhD
Professor of Neuroscience and Mental Health, and Research Director of the Centre for Autism at the School of Psychology and Clinical Language Sciences, University of Reading **(UK)**

رئيس الجلسة
بهيسماديف تشاكرابارتي
دكتوراه، أستاذ علم الأعصاب والصحة العقلية، ومدير أبحاث مركز التوحد في كلية علم النفس وعلوم اللغة السريرية، جامعة ريدينغ (المملكة المتحدة)

10.00 - 12.30 / Workshop

Advances in Personalized Medicine to Treat Autism

التقدم في الطب الشخصي لعلاج التوحد

Peter Lloyd-Thomas
M.Eng, MBA, Independent Researcher in the Translation of Autism Science into Therapy.

بيتر لويد توماس
ماجستير في الهندسة، ماجستير في إدارة الأعمال.
باحث مستقل في ترجمة علم التوحد إلى علاج.

Chairperson

Carmelo Rizzo, MD, PhD, Professor, Nutritionist.
University Niccolò Cusano in Rome, scientific director of International Academy of Clinical Nutrition (A.I.Nu.C.), scientific coordinator of international protocol for autism research and diagnostics of Association for Research on Psychosis and Autism (ARPA) **(Italy)**

رئيس الجلسة
كارميلو ريزو
دكتوراه في الطب، أستاذ، أخصائي تغذية، أخصائي أمراض الحساسية،
جامعة نيكولو كوزانو في روما، المدير العلمي للأكاديمية الدولية للتغذية السريرية (A.I.Nu.C.)، (إيطاليا)

14.00 - 16.30 / Workshop

ANRC Guidelines for Comprehensive Nutritional Support for Autism

إرشادات المركز الغذائى الأمريكى لدعم التوحد

James Adams, MS
Director of the Autism/Asperger's Research Program at Arizona State University, President of the Autism Society of Greater Phoenix **(USA)**

دكتور/ جيمس أدامز
مدير برنامج أبحاث التوحد/أسبرجر. جامعة ولاية أريزونا
ورئيس جمعية التوحد بالولايات المتحدة الأمريكية

16.30 - 18.00 / Workshop

Unlocking potential: a guide to autism and speech development thrugh the white matter improvement protocol.

إطلاق الإمكانات: دليل للتوحد وتطوير الكلام من خلال بروتوكول تحسين المادة البيضاء

Noraldin Al-Deri
Early Intervention Centers **(Jordan/UAE)**

نورالدين الديرى
مراكز التدخل المبكر (الأردن، EICADD
الإمارات العربية المتحدة)

Day 3. Morning, 29 Apr. Practical Accelerator Hall

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Farah El Zein

Assistant Professor in the Division of Counselling, Special Education, and Neuroscience Emirates College for Advanced Education

د فرح الزين
أستاذ مساعد في قسم الإرشاد و التربية الخاصة و علم الأعصاب
كلية الإمارات للتطوير التربوي

10.00 - 11.30 / Workshop

Treating Emotion Dysregulation with Mindfulness: Mindfulness-Based Cognitive Therapy for Children with Autism

علاج خلل التنظيم العاطفي باليقظة: العلاج المعرفي القائم على اليقظة للأطفال ذوي التوحد

Olessia Zmikhnovskaia, MA, CBT

Clinical psychologist, behavior analyst, author of the “Mindfulness Program for Parents of Children with Autism” **(Russia)**

أوليسيا زميخنوفسكايا
ماجستير، CBT، عالم نفس إكلينيكي، محلل سلوك،
مؤلف "برنامج اليقظة الذهنية لآباء الأطفال
المصابين بالتوحد" (روسيا)

11.30 - 13.00 / Workshop

Positive discipline for children with autism

التربية الايجابية للأطفال ذوي لتوحد

Sahar Daoud, Ph.D., CPDT

Leading expert in Child Mental Health & Steven Foster, CPDLT, Positive Discipline Lead Trainer, licensed clinical social worker **(Egypt)**

د. سحر داود
دكتوراه في طب نفس الأطفال،
خبيرة رائدة في الصحة العقلية للأطفال
(مصر)

Steven Foster

Parent Coach, Portland, USA
Co-author of Positive Discipline

ستيفن فوستر
مدرب الاباء، بورتلاند،
الولايات المتحدة الأمريكية
شارك في تأليف كتاب
الانضباط الإيجابي

Day 3. Afternoon, 29 Apr. Practical Accelerator Hall

Chairperson

Noraldin Al-Deri

Early Intervention Centers (Jordan/UAE)

رئيس الجلسة
نورالدين الدرعي
مراكز التدخل المبكر. الأردن/ EICADD،
.الإمارات العربية المتحدة

14.00 - 15.00 / Workshop

Clinical differential diagnostics of autistic spectrum disorders. EEG analysis methodology

التشخيص السريري الفارقي لاضطراب طيف التوحد. منهجية تحليل رسم المخ

Irina Kichuk

Associate Professor of Neurology, neurosurgery and medical genetics department at Pirogov Russian National Research Medical University, Head of functional diagnostics in Mental Health Center MeMento

إيرينا كيتشوك
دكتوراه. أستاذ مشارك في قسم طب الأعصاب وجراحة الأعصاب وعلم الوراثة الطبية في جامعة بيروجوف الروسية الوطنية للبحوث الطبية، ورئيس قسم التشخيص الوظيفي في مركز الصحة العقلية MeMento (روسيا).

Nikitenkova Irina

Chief Medical Officer, Psychiatrist, Psychotherapist;

Semiletova Nadezhda

Founder and Managing Director, MeMento **(Russia)**

15.00 - 16.00 / Workshop

Exploring Seizures in Autism: What You Need to Know

استكشاف نوبات الصرع في التوحد: ما تحتاجه إلى معرفته؟

Abdulla Alawadhi, PhD, CBDT

Licensed consult pediatric neurologist, Al Jalila Children's Specialty Hospital **(UAE)**

عبدالله العوضي
استشاري أعصاب الأطفال مرخص،
مستشفى الجليلة التخصصي للأطفال
(الإمارات العربية المتحدة)

16.00 - 17.00 / Workshop

The Autism is controlled using broad spectrum approach - the use of RGB Analysis to convert the narrow spectrum, with a focused attempt by taking the approach of trait idetification.

التحكم في التوحد باستخدام نهج واسع النطاق –استخدام تحليل السلوك المحكوم بالقواعد لتحويل الطيف الضيق ، مع محاولة مركزة من خلال اتباع نهج تحديد السمات.

دكتور/ محمد إبراهيم العلي
المؤسس والرئيس
التنفيذي ومدرب معتمد
للسلوك الوراثي/علم النفس
الغذائي/الاتصالات الإدارية

Dr. Mohammed Ibrahim Al Ali

Founder and CEO, Chief Trainer at SMART INSPIRATION UAE TRAINING **(UAE)**

اليزابيث بيرسي
المؤسس والرئيس
التنفيذي ومدرب معتمد
للسلوك الوراثي/علم النفس
الغذائي/الاتصالات الإدارية

Elizabeth Percy

Co-Founder and Chief Trainer of SMART INSPIRATION UAE TRAINING **(UAE)**

Day 4. Morning, 30 Apr. Practical Accelerator Hall

Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Sahar Daoud, M.D, CPDT

Leading expert in Child Mental Health & Steven Foster, CPDLT, Positive Discipline Lead Trainer, licensed clinical social worker **(Egypt)**

د. سحر داود
دكتوراه، CPDT، خبير رائد في الصحة العقلية للأطفال وستيفن فوستر، مدرب الانضباط الإيجابي، أخصائي اجتماعي سريري مرخص (مصر)

10.00 - 11.00 / Workshop

Augmentative alternative communication tools in Autism AAC in autism

ورشة عمل التواصل المعزز والبديل

Laila Y Alayadhi, PhD

Professor and Consultant of Clinical Neurophysiology, Medicine **(Saudi Arabia)**

بروفيسور/ ليلى العياضى
أستاذ واستشاري الفسيولوجيا العصبية السريرية. كلية الطب جامعة الملك سعود

11.00 - 12.00 / Workshop

Healthy Manding

ستيف وارد
ماجستيرومالك مشارك لشركة Whole Child Consulting, LLC (الولايات المتحدة الأمريكية)

Steve Ward, MA, BCBA

Co-owner of Whole Child Consulting, LLC **(USA)**

Chairperson

Hanan A Alfawaz, MSc, PhD

Professor of Nutrition & Metabolism; Food Science & Nutrition Department at King Saud University Riyadh **(Saudi Arabia)**

رئيس الجلسة
د.حنان الفواز
ماجستير ودكتوراه، أستاذ التغذية والتمثيل الغذائي؛ قسم علوم الأغذية والتغذية بجامعة الملك سعود الرياض (المملكة العربية السعودية).

14.00 - 14.45 / Workshop

Integrative medicine approach in the inhibition of 1C (PPP1R1C), RHOA containing receptor 3 (SORC3). ASD, intellectual disability (ID), for management of Statistical Manual of Mental Disorders (DSM) among autistic children with grade one.

نهج الطب التكاملي في تثبيط 1C (PPP1R1C)، RHOA الذي يحتوي على مستقبل 3 (SORC3). ASD، الإعاقة الذهنية (ID)، لإدارة الدليل الإحصائي للاضطرابات العقلية (DSM) بين الأطفال المصابين بالتوحد في الصف الأول.

Amina Ather

MD, PhD

Project Director of Integrative Medicine RIDM, European Medical Association **(Germany)**

أمينة أثير
دكتوراه في الطب، دكتوراه، مدير مشروع الطب التكاملي RIDM، الجمعية الطبية الأوروبية (ألمانيا)

Day 4. Afternoon, 30 Apr. Practical Accelerator Hall

14.45 - 15.15 / Lecture

Health-promoting effects of goat's milk in Autism Spectrum Disorders

"التأثير المعزز للصحة لحليب الماعز على اضطراب طيف التوحد"

Alhanouf Mohammed Al Dossari

King Saud UniversityPhD, Professor and Consultant of Clinical Neurophysiology, Medicine (Saudi Arabia)

الهنوف محمد سعد الدوسري
خريجة ماجستير من جامعة الملك سعود

15.15 - 16.30 / Lecture **Co-authors: Hanan A. Alfawaz, Musarat Amina, Nawal M. Al Musayeib, Afaf El-Ansary**

Artichoke (Cynara scolymus L.) as nutritional intervention strategy on propionic acid-induced rodent model of autism spectrum disorders.

الخرشوف كاستراتيجية للتدخل الغذائي في نموذج القوارض الناجم عن حمض البروبيونيك كغذاء لاضطراب طيف التوحد

Sana Razhan M. Alsubaiei, PhD

Advanced Nutritionist at Imam Muhammad Bin Saud Islamic University **(Saudi Arabia)**

دكتورة / سناء رزخان السبيعي
أخصائي متقدم التغذية جامعة الإمام محمد بن سعود الإسلامية المملكة العربية السعودية

16.30 - 17.15 / Lecture

Farm-animal-assisted Neurotherapy for Autism Spectrum and other Neurodiverse Conditions

العلاج العصبي بمساعدة حيوانات المزرعة لعلاج اضطراب طيف التوحد والحالات العصبية الأخرى

Susan D. Rich, MD, MPH, DFAPA

Board Certified Child/Adolescent and Adult Psychiatrist Distinguished Fellow, American Psychiatric Association Therapeutic & Learning Centers, P-LLC **(USA)**

دكتورة/ سوزان ريتش
طبيب نفسي معتمد للأطفال/المراهقين والبالغين

17.15 - 18.00 / Workshop

Role of abuse in pregnancy

دور الإساءة في الحمل

Samir A. Chaukkar, MD (Hom)

Professor, Dean at Dr Batra's Homeopathic Academy, Mumbai **(India)**

د. سمير شوكار
دكتوراه في الطب (هوميوباثي)،أستاذ وعميد أكاديمية الدكتور باترا للطب المثلي، مومباي (الهند).

27 - 30 April, 2024.Abu-Dhabi, UAE

Conference Program

Lecture Hall 2

Day 1. Afternoon, 27 Apr

Lecture Hall 2

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Mohamed El-Henawy, PhD
in Special Education, Executive Director
ADVANCE Center **(Egypt)**

رئيس الجلسة
د. محمد الحناوي
دكتوراه في التربية الخاصة من كلية التربية، المدير
التنفيذي لجمعية التقدم بجامعة عين شمس

14.00 - 14.45 / Lecture

Early signs of autism and diagnosis

العلامات المبكرة لمرض التوحد والتشخيص

Dr. Sahar Daoud, M.D, CPDT
Head of Cognitive, Social, and Emotional Development Dept., the Learning Resource Center **(LRC/Egypt)**

د. سحر داوود
دكتوراه طب نفس أطفال، رئيسة قسم النمو المعرفي،
والاجتماعي، والنفسي، بمركز مصادر التعلم (مصر).

14.45 - 15.30 / Lecture

What is the successful treatment for autism? What are the fad treatments we all should avoid?

ما هو العلاج الناجح للتوحد؟
ما هي العلاجات الزائفة التي علينا جميعا أن تجنها؟

Tasneem Abu Roza, BCBA
Founder of Support Works Consulting, ABA Unit Manager at Osraty for Physio & Rehab, and Consultant at Adaptive Choice Center

تسنيم أبو روزا
محلل سلوك معتمد، مؤسس استشارات أعمال الدعم ، مدير
وحدة تحليل السلوك التطبيقي في أسرتي للعلاج الطبيعي
والتأهيل ، ومستشار في مركز الاختيار التكيفي.

15.30 - 16.15 / Lecture

Teaching children with autism spectrum disorder in the natural environment

تدريب الاطفال المشخصين بالتوحد على تحمل الانتظار

Dr. Sayed El-Garhy
Ph.D. Special Education
Associate Prof. of Special Education, Faculty of Education, Fayoum, University, Clinical Consultant at the ADVANCE Center, **(Egypt)**

د. سيد الجارحي
دكتوراه التربية الخاصة، أستاذ مساعد
التربية الخاصة بكلية التربية –
جامعة الفيوم، استشاري فني بمركز
التقدم، مصر.

16.15 - 17.00 / Lecture

Teaching Mands (demands) and its role in reducing behavioral problems in children with autism

تدريس الطلب (المطالب) ودوره في
الحد من المشاكل السلوكية
لدى الأطفال ذوي التوحد

Abdullah Al-Balushi, MA, ABA
Special Teacher at Al-Ain Center for Autism **(Emirates)**

عبدالله البلوشي
ماجستير تحليل سلوك تطبيقي، مدرس متخصص بمركز العين
للتوحد (الإمارات)

Day 2. 28 Apr

Lecture Hall 2

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Sayed El-Garhy, PhD

Special Education, Associate Prof. of Special Education, Faculty of Education, Fayoum, University, Clinical Consultant at the ADVANCE Center, Egypt

رئيس الجلسة
د. سيد الجارحي
دكتوراه التربية الخاصة، أستاذ مساعد التربية الخاصة بكلية التربية –
جامعة الفيوم، استشاري فني بمركز التقدم، مصر

10.00 - 10.45 / Lecture

Uses of artificial intelligence for people with autism spectrum disorder

استخدامات الذكاء الاصطناعي للأشخاص ذوي اضطراب طيف التوحد

Sheikha Al Suwaidi

M.A. Special Education, Head of the Activities Department at the Abu Dhabi Autism Center, Zayed Higher Org. for People of Determination, Board member of the Emirates Autism Society

شيخة السويدي
ماجستير في التربية الخاصة ، رئيس قسم الأنشطة في مركز أبوظبي للتوحد ، مؤسسة زايد العليا لأصحاب الهمم ، عضو مجلس إدارة جمعية الإمارات للتوحد.

10.45 - 11.30 / Lecture

Teaching Academic Skills to Students with Autism Spectrum Disorder

تعليم المهارات الأكاديمية للطلاب ذوي اضطراب طيف التوحد

Dr. Mohamed El-Henawy, PhD

Special Education from Faculty of Education of Ain-Shams University, Executive Director of Advance Society **(Egypt)**

د. محمد الحناوي
دكتوراه في التربية الخاصة، المدير التنفيذي لجمعية التقدم (مصر).

11.30 - 13.00 / Workshop

Skills necessary for vocational training of ASD Children

المهارات اللازمة للتدأهيل المهني لأطفال التوحد

Dr. Khaled Mat-Hana, PhD

Vocational Rehabilitation
Seconded Professor Faculty of Arts, Sohag University Director of the Limitless Center for Vocational Rehabilitation

د. خالد مطحنة
دكتوراه في التربية الخاصة والتأهيل المهني، أستاذ منتدب بقسم الفئات الخاصة كلية الآداب جامعة سوهاج. مدير مركز ليمتلس للتأهيل المهني لذوي الإعاقة.

Chairperson

Dr. Sayed El-Garhy

Special Education, Associate Prof. of Special Education, Faculty of Education, Fayoum

رئيس الجلسة
د. سيد الجارحي
دكتوراه التربية الخاصة، أستاذ مساعد التربية الخاصة بكلية التربية –
جامعة الفيوم، استشاري فني بمركز التقدم، مصر

14.00 - 15.30 / Lecture

Using play to promote language development in autistic children

استخدام اللعب لتعزيز تنمية اللغة لدى الأطفال ذوي التوحد

Dr. Rehab Zaytoun, MD

Phoniatrics, Head of Speech and Language Department at the Learning Resource Center (LRC/ Egypt)

د. رحاب زيتون
دكتوراه في طب الصوتيات، رئيس قسم النطق واللغة في مركز مصادر التعلم (مصر)

15.30 - 17.00 / Workshop

Reaching Puberty for Girls with ASD

الإعداد لمرحلة البلوغ (البنات من ذوات التوحد)

Kefah Salem Hashemi, BA

Certified Special Education Trainer at Zayed Higher Organization (Emirates)

كفاح سالم الهاشمي
مدرب تربية خاصة بمؤسسة زايد العليا، فريق جسور الأمل (الإمارات).

Day 3. 29 Apr

Lecture Hall 2

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Khaled Mat-Hana, PhD

Vocational Rehabilitation
Seconded Professor Faculty of Arts, Sohag University
Director of the Limitless Center for Vocational Rehabilitation

رئيس الجلسة
د. خالد مطحنة، دكتوراه في التربية الخاصة والتأهيل المهني، أستاذ منتدب. مدير مركز ليمتلس للتأهيل المهني لذوي الإعاقة.

10.00 - 11.30 / Workshop

Dealing with the behaviors of children with ASD

التعامل مع سلوكيات الأطفال ذوي التوحد

Dr. Sayed El-Garhy, PhD

Special Education
Associate Prof. of Special Education, Faculty of Education, Fayoum University,
Clinical Consultant at the ADVANCE Center

د. سيد الجارحي
دكتوراه التربية الخاصة، أستاذ مساعد التربية الخاصة بكلية التربية – جامعة الفيوم، استشاري فني بمركز التقدم، مصر.

11.30 - 13.00 / Workshop

Training an autistic child on tolerance

تدريب طفل مشخص بالتوحد على التسامح

Maitha Saiid Al-Naimi, MA

Special Education Certified Behavior Analyst -QBA, Specialized Teacher at Al-Ain Center for Autism

ميثاء سعيد النعيمي
ماجستير التربية الخاصة، محلل سلوك معتمد، مدرس متخصص مركز العين للتوحد.

Dr. Mohamed El-Henawy, PhD

Special Education from Faculty of Education of Ain-Shams University, Executive Director of Advance Society **(Egypt)**

رئيس الجلسة
د. محمد الحناوي ، دكتوراه في التربية الخاصة، المدير التنفيذي لجمعية التقدم (مصر).

15.00 - 16.00 / Workshop

Organization of the Home Environment by Applying the Basic Living Skills-AFLS

تنظيم البيئة المنزلية من خلال تطبيق المهارات المعيشية الأساسية - AFLS

Dr. Chafica Gharbieh, PhD Psychology

Founder of Autism Learning Institute for Applied Behavior Analysis
"ALI for ABA", International Autism Consultant **(UK)**

د. شفيقة غربية
دكتوراه في علم النفس ، مؤسس معهد التوحد لتعلم تحليل السلوك التطبيقي، أستشاري دولي في التوحد (انجلترا).

16.00 - 17.00 / Workshop

Potty Training for children with autism - Slow & Fast Track

تدريب الأطفال ذوي التوحد على استخدام الحمام المسار البطيء والسريع

Rami Mosaad Abdo

Special Educator at Lotus Autism Center **(Emirates)**

رامي مسعد عبده
أخصائي التربية الخاصة بمركز زهرة اللوتس للتوحد (الإمارات)

Day 4. 30 Apr

Lecture Hall 2

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Shahira Abdel-Rahman, MA

MA Special & Inclusive Educatio, Certified Assessor CCET/UK. Special & Inclusive Education Consultant **(Riyadh)**

رئيس الجلسة
د. شهيرة عبد الرحمن
ماجستير التعليم الخاص والدمج، ومقيم معتمد من المملكة المتحدة، استشاري التعليم الخاص والدمج (الرياض)

10.00 - 11.30 / Workshop

Using Technology for Alternative Communication for Persons with Autism (Bilal Ortho application)

استخدام التكنولوجيا للاتصال البديل للأشخاص المشخصين بالتوحد (تقديم النسخة النموذجية لتطبيق بلال أورثو)

Bilal Al-Shehhi, M.Sc.

Speech & Language, SLT Specialist at Lotus Autism Center in Abu Dhabi **(Emirates)**

بلال الشحي
ماجستير علوم اللغة والكلام، أخصائي تخاطب بمركز زهرة لوتس للتوحد بأبوظبي (الإمارات).

11.30 - 13.00 / Workshop

Training Children with Autism to Stay Dry while sleeping

تدريب الأطفال ذوي التوحد على البقاء جافاً أثناء النوم

Rami Mosaad Abdo

Special Educator at Lotus Autism Center **(Emirates)**

رامي مسعد عبده
أخصائي التربية الخاصة بمركز زهرة اللوتس للتوحد (الإمارات)

Chairperson

Dr Hala Abdel-Salam,

Director of Basic & Inclusive Education Egypt Ministry of Education.

رئيس الجلسة
د. هالة عبد السلام، مدير التعليم الأساسي والدمج، وزارة التربية والتعليم (مصر)

15.00 - 16.00 / Workshop

Areas of teaching pre-academic skills to children with autism

مجالات تدريس مهارات ما قبل الأكاديمية للأطفال المشخصين بالتوحد

Dr. Mohamed El-Henawy, PhD

Special Education from the Faculty of Education of Ain-Shams University, Executive Director of Advance Society **(Egypt)**

د. محمد الحناوي
دكتوراه في التربية الخاصة من كلية التربية بجامعة عين شمس

16.00 - 18.00 / Workshop

Implementing community inclusion for persons with ASD

تطبيق الدمج المجتمعي لذوي التوحد

Tasneem Abu Roza, BCBA

Founder of Support Works Consulting, ABA Unit Manager at Osraty for Physio & Rehab, and Consultant at Adaptive Choice Center.

تسنيم أبو روزا
محلل سلوك معتمد، مؤسس استشارات أعمال الدعم ، مدير وحدة تحليل السلوك التطبيقي في أسرتي للعلاج الطبيعي والتأهيل ، ومستشار في مركز الاختيار التكيفي.

Ahmed Adly

Special Educator Sharifa Yateem Center for Rehabilitation (Emirates)

أحمد عدلي
أخصائي التربية الخاصة بمركز شريفة يتيم للتأهيل (الإمارات)

27 - 30 April, 2024.Abu-Dhabi, UAE

Conference Program

Lecture Hall 3

Day 1. Afternoon, 27 Apr

Lecture Hall 3

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Khaled Mat-Hana, PhD

Vocational Rehabilitation, Seconded Professor, Director of the Limitless Center for Vocational Rehabilitation.

رئيس الجلسة
د. خالد مطحنة، دكتوراه في التربية الخاصة والتأهيل المهني، أستاذ منتدب ، مدير مركز ليمتلس للتأهيل المهني لذوي الإعاقة.

14.00 - 14.45 / Lecture

Development of communication and language skills of autistic children

تنمية مهارات التواصل واللغة لدى أطفال التوحد

Dr. Rehab Zaytoun, MD

Phoniatrics, Head of Speech and Language Department at the Learning Resource Center (LRC/ Egypt).

د. رحاب زيتون
دكتوراه في طب الصوتيات، رئيس قسم النطق واللغة في مركز مصادر التعلم (مصر).

14.45 - 15.30 / Lecture

Neurocognitive processing (language and speech)

التناول العصبي المعرفي (لغة وتخاطب)

Prof. Dr. Ibtissem Mecheri

Professor at Tamanghasst University /Algeria

أ.د. ابتسام مشري
دكتوراه علم النفس اللغوي والمعرفي اخصائية أمراض صوت لغة وتواصل بروفيسور بجامعة تامنغست الجزائر

15.30 - 16.15 / Lecture

Caregiver stress

إجهاد مقدم الرعاية

Dr. Khaled Kadry, MD

Child and Adolescent Psychiatry, Consultant for the Strong-Minds Program, Special Olympics.

دكتور خالد قدري
دكتوراه في الطب النفسي للأطفال والمراهقين، مستشار سريري لبرنامج العقول القوية ، الأولمبياد الخاص.

16.15 - 17.00 / Lecture

Alternative communication of autistic children

التواصل البديل للأطفال ذوي اضطراب طيف بالتوحد

Bilal Al-Shehhi, MSc

Speech & Language, Speech & Language Specialist at Lotus Autism Center in Abu Dhabi (Emirates).

بلال الشحي
ماجستير علوم اللغة والكلام، أخصائي تخاطب بمركز اللوتس للتوحد بأبوظبي (الإمارات)

Day 2. Morning, 28 Apr

Lecture Hall 3

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Rehab Zaytoun, MD, BSc, MSc

Head of Speech and Language department at the Learning Resource Center (LRC), Cairo **(Egypt)**

رئيس الجلسة
د. رحاب زيتون
دكتوراه في طب الصوتيات، رئيس قسم النطق واللغة في مركز مصادر التعلم (مصر).

10.00 - 10.45 / Lecture

Sleep disorders in children with autism

اضطرابات النوم لدى الأطفال ذوي التوحد

Dr. Chafica Gharbieh

PhD Psychology

Founder of Autism Learning Institute for Applied Behavior Analysis "ALI for ABA", International Autism Consultant (UK).

د. شفيقة غربية
دكتوراه في علم النفس ، مؤسس معهد التوحد لتعلم تحليل السلوك التطبيقي، أستشاري دولي في التوحد (انجلترا).

10.45 - 11.30 / Lecture

Training parents on developing communication skills in children with autism

تدريب أولياء الأمور على تنمية مهارات التواصل لدى الأطفال المشخصين بالتوحد

Dr. Ibtissam Mechri, PhD

Linguistic and Cognitive Psychology, Professor at Tamanghasst University **(Algeria)**

د ابتسام مشري
دكتوراه علم النفس اللغوي والمعرفي
اخصائية أمراض صوت لغة وتواصل
بروفيسور بجامعة تامنغست بالجزائر

11.30 - 13.00 / Lecture

Family plan for the early intervention stage: stations from understanding to application

خطة الأسرة لمرحلة التدخل المبكر: محطات من الفهم إلى التطبيق

Benan Farhat, MA

Special Education,
MA Entrepreneurship,
QBA Behavior Analyst,
Certified Professional Trainer (CPT 13)

بنان فرحات
ماجستير التربية الخاصة، ماجستير ريادة الأعمال،
محلل سلوك الرابطة، مدرب محترف معتمد (CPT 13)

Day 2. Afternoon, 28 Apr — Lecture Hall 3

Chairperson

Dr. Mohamed El-Henawy
Special Education from the Faculty of Education of Ain-Shams University **(Egypt)**

رئيس الجلسة
د. محمد الحناوي
دكتوراه في التربية الخاصة من كلية التربية
بجامعة عين شمس

14.00 - 15.30 / Lecture

Advancing autism support and Human Rights in the MENA region. Establishing prfessional standrats

تعزيز دعم التوحد وحقوق الإنسان في منطقة الشرق الأوسط وشمال أفريقيا: إنشاء معايير مهنية

Jemman Ammry
Founder and CEO of the Autism MENA Foundation (AMENA), Internship program for therapists in the field of autism, Faculty of Special Education, Jordan University.

جيمان العمري
المؤسس والرئيس التنفيذي لمؤسسة التوحد الشرق الأوسط
وشمال أفريقيا (أرماني) ، برنامج التدريب للمعالجين في مجال التوحد ،
كلية التربية الخاصة ، الجامعة الأردنية.

Christine DerSarkissian, BCBA, QBA & IBA,
Behavior Analyst. Co-founder of EBISA Center in Lebanon and the International Autism Expert at Autism MENA (AMENA) Training ABD Professional Development Institute.

كريستين ديرساركيسيان
محلل السلوك. مؤسس مشارك لمركز إيبسا في لبنان، وخبير التوحد الدولي في معهد التوحد للتدريب والتطوير المهني بالاردن.

15.30 - 17.00 / Lecture

Reaching Puberity (Boys with ASD)

الإعداد لمرحلة البلوغ (البنين من ذوي التوحد)

Ahmed Alzughbi, BA
Certified Trainer Zayed Higher Org
Certified Trainer at CERT Higher Technical Colleges

أحمد الزغبي
مدرب معتمد بمؤسسة زايد العليا،
مدرب معتمد في كليات CERT التقنية العليا.

Day 3. Morning, 29 Apr

Lecture Hall 3

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Jemman Ammry

Founder and CEO of the Autism MENA Foundation (AMENA), Internship program for therapists in the field of autism, Faculty of Special Education, Jordan University.

رئيس الجلسة
جيمان العمري
المؤسس والرئيس التنفيذي لمؤسسة التوحد الشرق الأوسط وشمال أفريقيا (أرماني) ، برنامج التدريب للمعالجين في مجال التوحد ، كلية التربية الخاصة ، الجامعة الأردنية.

10.00 - 11.30 / Lecture

How to treat an autistic child creatively?

كيفية علاج طفل مشخص بالتوحد بشكل خلاق؟

Maysoon Al-Nashash

Occupational Therapist, Certified Family Counselor, Montessori Trainer OT at Zayed Higher Organization **(Emirates)**

مايسون النشاش
أخصائي العلاج الوظيفي، مستشار أسر معتمد، مدرب مونتيسوري معتمد، معالج وظيفي لدى مؤسسة زايد العليا (الإمارات).

11.30 - 13.00 / Lecture

Steps Towards Independence

خطوات نحو الإستقلالية

Juma Shuhaib

Special Education and Behavioral Intervention

جمعة مصطفي شعيب
اخصائي التربية الخاصة.

Chairperson

Dr. Talaat Wazna, M.Sc

Neurology,Secretary General Academy of Special Education Autism Charity in Saudi

رئيس الجلسة
د. طلعت الوزنة
ماجستير طب علم الأعصاب، مؤسس وأمين عام (أكاديمية التربية الخاصة للتوحد / الجمعية الخيرية السعودية للتوحد

14.00 - 15.30 / Lecture

Building independence and integrating persons with autism into work

بناء الاستقلالية ودمج الأشخاص ذوي التوحد في العمل

Dr. Khaled Mat-Hana, PhD

Vocational Rehabilitation Seconded Professor Faculty of Arts, Sohag University
Director of the Limitless Center for Vocational Rehabilitation

د. خالد مطحنة
دكتوراه في التربية الخاصة والتأهيل المهني، أستاذ منتدب بقسم الفئات الخاصة كلية الآداب جامعة سوهاج. مدير مركز ليمتلس للتأهيل المهني لذوي الإعاقة

15.30 - 17.00 / Lecture

Vocational rehabilitation for adolescents and youth with autism

التأهيل المهني للمراهقين والشباب ذوي التوحد

Day 4. Morning, 30 Apr — Lecture Hall 3

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Sahar Daoud, M.D, CPDT
Leading expert in Child Mental Health **(Egypt)**

رئيس الجلسة
د. سحر داوود
دكتوراه طب نفس أطفال، خبيرة رائدة في مجال الصحة النفسية للطفل (مصر)

10.00 - 11.30 / Lecture

Organizing the environment for children with autism spectrum disorder

تنظيم البيئة للأطفال المصابين بالتوحد

Sheikha Al Kaabi,
Psychologist, Certified Professional Trainer
Specialist at Al-Ain Autism Center (Abu Dhabi)

شيخة الكعبي
أخصائي علم نفس، مدرب متخصص معتمد،
أخصائي بمركز العين للتوحد (الإمارات)

11.30 - 13.00 / Lecture

Safeguarding children with ASD

حماية الأطفال ذوي اضطراب طيف التوحد

Dr. El-Sayed Al-Khamisi, PhD
Psychology with focus on Autism
Vice Dean of the College of Education, the Afro-Asian University
Associate Professor of Psychology

الدكتور السيد الخميسي
دكتوراه علم النفس تخصص التوحد، نائب عميد كلية التربية،
الجامعة الأفرو آسيوية أستاذ مشارك في علم النفس

Chairperson

Dr. Rehab Zaytoun, MD, BSc, MSc
Head of Speech and Language department at the Learning Resource Center (LRC), Cairo (Egypt)

رئيس الجلسة
د. رحاب زيتون
دكتوراه في طب الصوتيات، رئيس قسم النطق واللغة في مركز مصادر التعلم (مصر).

14.00 - 15.30 / Lecture

Preparing Educational Tools & Kits for children with autism

إعداد الأدوات والأطقم التعليمية للأطفال المصابين

Iman Al-Ebry
ABAT Certificate, Special Educator,
Certified Trainer Bridges of Hope Team,
Zayed Higher Organization.

إيمان العبري
أخصائي التربية الخاصة، شهادة ABAT، مدرب معتمد
فريق جسور الأمل، مؤسسة زايد العليا.

15.30 - 17.00 / Lecture

Planning the implementation of educational inclusion of children with autism in regular schools

التخطيط لتنفيذ الدمج التربوي للأطفال ذوي التوحد بالمدارس النظامية

Dr. Shahira Abdel-Rahman, MA
Special & Inclusive Education
Certified Assessor CCET/UK
B.Sc. Pharmacology & Biotechnology

د. شهيرة عبد الرحمن
ماجستير التعليم الخاص والدمج مقيم معتمد / المملكة المتحدة بكالوريوس صيدلة والتكنولوجيا الحيوية

27 - 30 April, 2024

Conference Program

Lecture Hall 4

Day 1. Afternoon, 27 Apr

Lecture Hall 4

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Maha Helali, MA

Special & Inclusive Ed., Technical Advisor to Minister of Social Solidarity on Disability & Rehabilitation Affairs (Egypt)

رئيس الجلسة
مها هلالي
ماجستير تربية خاصة ودمج، جامعة لندن كوليدج، مستشار فني وزير التضامن الاجتماعي لشئون الإعاقة والتأهيل (مصر)

14.00 - 15.30 / Workshop

Inclusion Officials Seminar: Promoting the inclusion of persons with autism Challenges & Solutions

ندوة مسؤولي الدمج: تعزيز دمج الأشخاص ذوي التوحد التحديات والحلول

Ms. Heba Hagrass, BCBA,IBA, MSc

Advocate, international disability consultant, and researcher with a Ph.D. in Disability Studies from the University of Leeds

د. هبه هجرس
المقرر الخاص المعني بالأشخاص ذوي الإعاقة بالأمم المتحدة

Dr. Talat Alwazna, MSc

Neurology, Secretary General Academy of Special Education Autism Charity in Saudi

د طلعت الوزنه
دكتواره في طب الاعصاب استشاري امراض المخ والأعصاب الامين العام الجمعيه السعوديه الخيريه للتوحد.

Jemman Ammry, MSc

Founder and CEO of the Autism MENA Foundation (AMENA), Entrepreneurship program for therapists in the field of autism, Faculty of Special Education, Jordan University.

جيمان العمري
المؤسس والرئيس التنفيذي لمؤسسة التوحد الشرق الأوسط وشمال أفريقيا (أرمآني) ، برنامج التدريب للمعالجين في مجال التوحد ، كلية التربية الخاصة ، الجامعة الأردنية.

Hala Abdel-Salam Khafagy

is the Head of the Central Department of Basic Education (Primary and Preparatory Stages), she also heads the Central Department for Special Education in Egypt.

د. هالة عبد السلام
مدير التعليم الأساسي والدمج، وزارة التربية والتعليم (مصر)

Day 2. 28 Apr

Lecture Hall 4

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Sahar Daoud, M.D, CPDT
Leading expert in Child Mental Health (Egypt)

رئيس الجلسة
د. سحر داوود
دكتوراه في طب نفس أطفال، خبيرة رائدة
في مجال الصحة النفسية للطفل (مصر)

10.00 - 11.30 / Workshop

Feeding Challenges Faced by Autism Spectrum Disorder

تحديات التغذية التي يواجهها ذوي اضطراب طيف التوحد

Sharifa Yateem, BCBA,IBA, MSc.
Founder of Sharifa Yateem Center for Rehabilitation

شريفة يتيم
ماجستير علم النفس:
مؤسس مركز شريفة يتيم للتأهيل

Ahmed Nofal
Speech & Language Pathologist
Sharifa Yateem Center,
TalkTools Certified Trainer

أحمد نوفل
أخصائي تخاطب مركز شريفة يتيم
للتأهيل، مدرب تالكتولس معتمد

Abdullah Obeidat
Occupational Therapist at
Yateem Specialized Center.

عبد الله عبيدات
معالج علاج وظيفي،
مركز شريفة يتيم للتأهيل

11.30 - 13.00 / Workshop

My son's Journey curing from autism

رحلة ابني: علاج اضطراب طيف التوحد

Mrs. Rasha Zaki
Life coach

رشا زكي
لايف كوتش

14.00 - 15.30 / Lecture

Pre Service Training Programs and Evidence Based Practices in the Field of Autism Teaching

برامج الاعداد قبل الخدمة والممارسات المستندة الى الأدلة العلمية في ميدان تدريس التوحد.

Dr. Mohammad AL Jabery, PhD
Special Education
Holds the position of Associate Professor in the Department of Counseling and Special Education, University of Jordan.

د. محمد الجابري
دكتوراه. في التربية الخاصة
يشغل منصب أستاذ مشارك في قسم الإرشاد والتربية
الخاصة الجامعة الأردنية

Day 3. Morning, 29 Apr

Lecture Hall 4

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Dr. Chafica Gharbieh, PhD
Psychology, Founder of the Autism Learning Institute for Applied Behavior Analysis “ALI for ABA”

رئيس الجلسة
د. شفيقة غربية
دكتوراة في علم النفس ، مؤسس معهد التوحد لتعلم تحليل السلوك التطبيقي

11.30 - 13.00 / Workshop

Parents Panel Discussion (I) – ASD Puberty & Youth Issues – Arabic Language

حلقة نقاش أولياء الأمور (I)
التوحد البلوغ وقضايا الشباب – باللغة العربية

Mai Dahan
Media specialist in radio and digital media, founder of "Autism Diaries" page on social media, and host of the "Ana Huna" podcast to raise autism awareness in the Middle East.

مي دهان
متخصص إعلامي في الإعلام الإذاعي والرقمي، مؤسس صفحة "يوميات التوحد" على مواقع التواصل الاجتماعي، ومقدم بودكاست "أنا هنا" للتوعية بمرض التوحد في الشرق الأوسط.

Faten Merashly
Certified Applied Behavioral Analyst and Acceptance and Commitment Therapy (ACT) therapist - Special Education, Master's in Educational Administration.

فاتن مرعشلي
محلل سلوكي تطبيقي معتمد ومعالج بالقبول والالتزام (ACT) - التربية الخاصة، ماجستير في الإدارة التربوية.

Ruba Tabari
Pharmaceutical Doctor and Founder of Wonders for Education and Mainstreaming kids of Determination in Schools.

ربى الطباري
دكتوة صيدلانية ومؤسس منظمة عجائب لتعليم وإدماج الأطفال أصحاب الهمم في المدارس.

Dr. Rania Seliem
Consultant Hematopathologist, Head of Rashid Hospital laboratories Dubai Health and mother of a teenager living with ASD attending an integrated school in Dubai

رانيا سليم
استشاري أمراض الدم ورئيس مختبرات مستشفى راشد بصحة دبي وأم مراهق يعاني من اضطراب طيف التوحد في مدرسة متكاملة في دبي.

Day 3. Afternoon, 29 Apr

Lecture Hall 4

Chairperson

Jemman Ammry

Founder and CEO of the Autism MENA Foundation (AMENA), Internship program for therapists in the field of autism, Faculty of Special Education, Jordan University.

رئيس الجلسة
جيمان العمري
المؤسس والرئيس التنفيذي لمؤسسة التوحد الشرق الأوسط وشمال أفريقيا (أرماني) ، برنامج التدريب للمعالجين في مجال التوحد ، كلية التربية الخاصة ، الجامعة الأردنية.

14.00 - 15.30 / Workshop

Sharjah City for Humanitarian Services (SCHS) Workshop: Using Music to Enhance Social Skills

ورشة مدينة الشارقة للخدمات الإنسانية : استخدام العلاج بالموسيقي لتنمية مهارات التفاعل الاجتماعي

Mrs. Hadeer Ibrahim

MA Special, Music Therapy Practitioner, Sharjah Autism Center **(Emirates)**

أ/هدير إبراهيم
ماجستير التربية الخاصة، ممارس العلاج بالموسيقى بمركز الشارقة (الإمارات).

Chairperson

Dr. Chafica Gharbieh, PhD

Psychology, Founder of the Autism Learning Institute for Applied Behavior Analysis “ALI for ABA”

رئيس الجلسة
د. شفيقة غربية
دكتوراة في علم النفس ، مؤسس معهد التوحد لتعلم تحليل السلوك التطبيقي

15.30 - 17.00 / Workshop

Early Intervention, Autism Diagnosis - Challenges & Mother’s Experiences, Neurodiversity Some Solutions

التدخل المبكر، تشخيص التوحد – التحديات، تجارب الأمهات، التنوع العصبي وبعض الحلول

Zahra Aljasmi

Co-founder and Managing Director of Georgetown Early Intervention Center Autism.

زهرة الجسمي
المؤسس المشارك والمدير العام لمركز جورجتاون للتدخل المبكر.

Sarah Touma

Executive Assistant at Ecolab.

سارة توما
مساعدة تنفيذية في شركة ايكولاب

Karen Kehdy

Neurodiversity, Advocate and Writer, public speaker.

كـــارين الكعـــدي
ناشطة وكاتبة في مجال التنوع العصبي، أم لطفلة توحد و مديرة مجموعات الدعم

Fatima Al-Sarayrah

Psychologist, writer for Al Khaleej newspaper and author of stories about autism disorder.

فاطمة الصرايرة
اخصائية نفسيه وتعديل سلوك الاطفال والمراهقين من البورد الامريكي الكندي.

Suzan Ahmed

Consultant in Dubai Health Authority and a certified trainer in the Emirates Association of Certified Consultants and Trainers.

سوزان أحمد
استشاري في هيئة صحة دبي
ومدرب معتمد في جمعية الإمارات للاستشاريين والمدربين المعتمدين.

Day 4. Morning, 30 Apr

Lecture Hall 4

Registration Registration Registration Registration Registration Registration Registration

Chairperson

Maha Helali, MA
Special & Inclusive Ed., Technical Advisor to Minister of Social Solidarity on Disability & Rehabilitation Affairs **(Egypt)**

رئيس الجلسة
مها هلالي
ماجستير تربية خاصة ودمج، جامعة لندن كوليدج،
مستشار فني وزير التضامن الاجتماعي لشئون الإعاقة والتأهيل (مصر)

10.00 - 12.00 / Workshop

Panel III: Discussing the initiative of developing criteria for the accreditation of autism centers in the Arab region

حلقة نقاش (III) : مناقشة مبادرة وضع معايير لاعتماد مراكز التوحد في المنطقة العربية

Dr. Talaat Al-Wazna, M.Sc
Neurology, Secretary General Academy of Special Education Autism Charity in Saudi.

د. طلعت الوزنة،
ماجستير طب علم الأعصاب، مؤسس وأمين عام أكاديمية التربية الخاصة للتوحد / الجمعية الخيرية السعودية للتوحد.

Chairperson

Dr. Sayed El-Garhy, PhD
Special Education, Associate Prof. of Special Education, Faculty of Education, Fayoum

رئيس الجلسة
د. سيد الجارحي
دكتوراه التربية الخاصة، أستاذ مساعد التربية الخاصة بكلية التربية – جامعة الفيوم

14.00 - 15.30 / Workshop

Using TEACCH Transition Assessment Profile (TTAP) for Transition Planning

مقياس تيتش لتقييم المرحلة الانتقالية TTAP

Mahmoud Abdel Maksoud
Clinical Psychologist, Sharjah Autism Center

محمود عبد المقصود،
اختصاصي نفسي اكلينيكي في مركز الشارقة للتوحد

Mohammed Waleed al Shamali
Educational Supervisor, Sharjah Autism Center

محمد وليد الشمالي،
مشرف تربوي في مركز الشارقة

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

Together We Can Make a Difference

معـــاً يمكـــننا إحـــداث الفـــرق

XII


Autism
Challenges
Solutions
2024


Autism
Challenges
Solutions
2024


Autism
Challenges
Solutions
2024


Autism
Challenges
Solutions
2024


الدكتورة / هبة هجرس
المقرر الخاص المعني بحقوق الاشخاص ذوي الإعاقة
Dr. Heba Hagrass
Special Rapporteur on the rights of persons with disabilities

Conference's
Abstracts

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Phenotypes and mechanisms: Probing autism in and outside the lab

Bhismadev Chakrabarti
b.chakrabarti@reading.ac.uk
Professor of Neuroscience and Mental Health and Research Director of the Centre for Autism at the University of Reading (UK)

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/2daxz114

KEYWORDS
Autism Spectrum Conditions, behavioural , phenotyping , boundaries

HOW TO CITE

Phenotypes and mechanisms: Probing autism in and outside the lab. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism Spectrum Conditions are behaviourally defined, which highlights the need to focus on understanding the behavioural phenotype. Many autistic people experience challenges in social-communicative behaviour. A theoretical account suggests that atypical response to social rewards plays a causal role in such challenges. In our lab, we developed and tested different paradigms to create new ways to quantify the response to social rewards in autism, and reveal new insights into its underpinning mechanisms. This research, like the majority of autism research worldwide, takes place within Europe and the USA. To move beyond these artificial boundaries in another strand of our research, we studied the autistic phenotype in >11000 Indian schoolchildren. This set of studies not only allowed us to build an autism research toolkit in India, but also provided critical insights into the impact of socio-linguistic factors on the manifestation of autism. The final strand of our ongoing research connects the research within and outside the laboratory through the development of a mobile app to help with digital phenotyping of autism-related features in the general population. The aim of this app is for non-specialists to be able to identify autism in low-resource settings through scalable phenotypic assessments that tap performance in multiple behavioural domains.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Updates on Genetics and Genomics Research in ASD

Antonio Novelli
novelli.ant@gmail.com
Director of the Medical Genetics Laboratory of Children's Hospital Bambino Gesù (Italy)

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/vfz1t946

KEYWORDS:

Autism spectrum disorder (ASD), techniques, strategies, heterogenous

HOW TO CITE

Updates on Genetics and Genomics Research in ASD. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism spectrum disorder (ASD) is a heterogenous condition with a wide range of elements contributing to its presentation, including both common and rare genetic variants, as well as environmental and developmental factors. In rare instances, ASD is associated with known syndromes such as tuberous sclerosis, 22q11 microdeletion or Down syndrome. Over the past two decades, as a result of revolutionary technology including Next Generation Sequencing (NGS) and Optical Genome Mapping (OGM), autism genetics research grew rapidly leading to large number of discoveries, including new genetic loci, hundreds of alterations in the genetic sequence, expression, epigenetic transformation, and interactions with other physiological and environmental systems have been found in association with ASD. The present work is aimed to characterize a cohort of 100 pediatric patients aged between 3 and 12 years, affected by non-syndromic ASD according to the DSM-V. This approach has allowed the identification of causative genetic variants in at least seven families. The identified variants were harbored in well-known genes involved in the pathogenesis of autism spectrum disorder and non-syndromic mental retardation, such as TNIK and SHANK3. Potentially causative variants have also been identified in susceptibility ASD genes, such as SHANK2 and NRXN3. Interestingly, rare de novo and compoud heterozygous variants have also been identified in genes never described before in association with ASD, but related to nervous system development, mantainance and functional regulation. By using molecular modeling and dynamics simulation techniques, we are investigating the impact of this variants on the protein stability and interaction network, thereby providing a preliminary assessment of its mechanistic role. In conclusion, here we discuss the results obtained in this study and the recent advances in the ASD genetics and genomics, to better understand role of of the ASD- associated genetic factors. The future of genetic research, due to interdisciplinary collaborations, could facilitate the personalized medicine as well as genetic counselling and early intervention strategies.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

The Healthy Baby Roadmap: An Actionable Strategy for Reducing the Risk of Chronic Illness in Children Starts with Preconception and Pregnancy

Vicki Kobliner
vicki@holcarenutrition.com
Pediatric And Adult Functional Medicine Dietitian, owner of Holcare Nutrition in Wilton, CT (USA)

ARTICLE INFO

Published on 5th of July 2024.
Doi:10.54878/wxz3e170

KEYWORDS

ADHD, Pregnancy, ASD, Autism, Anxiety

HOW TO CITE

The Healthy Baby Roadmap: An Actionable Strategy for Reducing the Risk of Chronic Illness in Children Starts with Preconception and Pregnancy. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

The incidence of chronic illness in children has reached epidemic proportions., In the US, one out of 2 children may be diagnosed with conditions such as Autism, ADHD, anxiety, depression, asthma, allergies, eczema and autoimmune disease, among others. The research is clear that maternal health, nutrition and lifestyle, both prior to conception and throughout pregnancy can influence the risk of having a child with a chronic illness. Parents deserve to be informed and empowered to reduce these risks for their future children. We will review current literature, with a focus on identifying actionable steps to support parents-to-be.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

`

Gamma-band neural activity and its relation to language skills and core symptoms of Autism Spectrum Disorder

Dr. Vardan Arutiunian
vardan.arutyunyan89@gmail.com
Center for Child Health, Behavior and Development Seattle Children's Research Institute Seattle, WA, United States of America

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/hgjmck24

KEYWORDS

Neurobiological studies, autism spectrum disorder (ASD), magnetoencephalography, autism

HOW TO CITE

Gamma-band neural activity and its relation to language skills and core symptoms of autism spectrum disorder. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Neurobiological studies of the past decade have suggested that the imbalance between neural excitation (E) and inhibition (I) in the neural systems is one of the key pathophysiological mechanisms in autism. Cortical gamma-band oscillations (30-100Hz) measured with electro- and/or magnetoencephalography (EEG/MEG) is considered as a non-invasive measure of E/I balance and, thus, they are of particular interest in autism research. In the talk, the results of the different multi-site projects in the U.S. addressed EEG-based biomarkers of autism will be presented. First, in a group of ~300 children with and without autism, using a syllable comprehension task in EEG, we showed the elevation of gamma activity in children with autism and this pathological increase of power was associated with worse behavioral language skills. Second, in a group of ~200 infants (6 and 12 months old) with and without elevated risk for developing autism, using another EEG task (presentation of videos consisting social vs. nonsocial content), similar elevation of gamma activity was observed in infants at high risk for developing autism and this increase of power was related to worse communication clinical outcome at 24 months. Finally, in a group of ~200 children with and without autism in a simple resting-state EEG paradigm, we observed increased gamma power in children with autism and this increase was associated with lower non-verbal IQ and higher presence of autistic traits. Importantly, cluster-based analysis revealed subgroups of children with autism based on the gamma power with both increased and reduced power, pointing to non-linear relationships between neural activity and clinical measures ("U" shaped functioning with extreme low and high values representing altered functioning). The results of the studies suggested that, indeed, altered E/I balance is associated with clinical characteristics of children with autism.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

The possible role of sodium leakage channel localization factor-1 in the pathophysiology and severity of autism spectrum disorders

Sarah Al-Mazidi
salmazeedi@gmail.com
College of Medicine, Imam Mohammad Ibn Saud Islamic University, Riyadh, Saudi Arabia

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/9ck0hg58

KEYWORDS

Autism spectrum disorder (ASD), Neural dysregulation, neurodevelopmental disorder, diagnosis

HOW TO CITE

The possible role of sodium leakage channel localization factor-1 in the pathophysiology and severity of autism spectrum disorders. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by social, stereotypical, and repetitive behaviors. Neural dysregulation was proposed as an etiological factor in ASD. The sodium leakage channel (NCA), regulated by NLF-1 (NCA localization factor-1), has a major role in maintaining the physiological excitatory function of neurons. We aimed to examine the level of NLF-1 in ASD children and correlate it with the severity of the disease. We examined the plasma levels of NLF-1 in 80 ASD and neurotypical children using ELISA. The diagnosis and severity of ASD were based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), Childhood Autism Rating Score, Social Responsiveness Scale, and Short Sensory Profile. Then, we compared the levels of NLF-1 with the severity of the disease and behavioral and sensory symptoms. Our results showed a significant decrease in the plasma levels of NLF-1 in ASD children compared to neurotypical children ($p < 0.001$). Additionally, NLF-1 was significantly correlated with the severity of the behavioral symptoms of ASD ($p < 0.05$). The low levels of NLF-1 in ASD children potentially affect the severity of their behavioral symptoms by reducing neuron excitability through NCA. These novel findings open a new venue for pharmacological and possible genetic research involving NCA in ASD children.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Artichoke (Cynara scolymus L.) as nutritional intervention strategy on propionic acid-induced rodent model of autism spectrum disorders.

Sana Razhan M. Alsubaiei
al_subaiei2007@yahoo.com
Development and Quality Officer in Intellectual Property Management, Center for Innovation and Entrepreneurship at (IMSIU) University

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/n6nmqq98

KEYWORDS

autism spectrum disorder (ASD), neurodevelopmental disorder, Nutritional Intervention therapy's, GABA, neuroinflammation

HOW TO CITE

Artichoke (Cynara scolymus L.) as nutritional intervention strategy on propionic acid-induced rodent model of autism spectrum disorders. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

The connection between nutrition and autism spectrum disorder (ASD), a neurodevelopmental disorder characterized by notable delays or deviations in interaction and communication, has offered a novel perspective and suggests that nutrition may contribute to the development of ASD in addition to being a useful treatment modality by reducing symptoms Therefore, the majority of people with ASD employ nutritional therapies to reduce gastrointestinal and behavioral symptoms, both with and without therapeutic supervision A potent source of antioxidants and minerals, artichoke extract may be utilized to reduce oxidative damage related chronic non communicable diseases. Here, we evaluated Nutritional Intervention therapy's effects on the PPA model of autism by biochemical means. 42 male Sprague Dawley albino rat pups, split into seven groups, were employed in our study. Throughout the course of the 30-day trial, the control group was only given water and a typical diet. As a mouse model of ASD, the theird group was fed a usual diet until the end of the trial, after which they were given 250 mg/kg body weight (BW) of propionic acid (PPA) orally for three days. The second group was the PPA-induced ASD model, which was given a regular diet for 27 days before being given 250 mg/kg of PPA orally for three days. The other group was given artichokes (400 mg/kg) and luteolin (50 mg/kg) daily for 27 days, followed by three days of PPA (250 mg/kg BW) in addition to their regular diet. After receiving PPA (250 mg/kg body weight (BW)) for three days, the other two groups were given a regular diet along with 400 mL/kg BW/day of artichokes and 50 mg/kg BW/day of luteolin, which is the main antioxidant and anti-inflammatory component of artichokes, for a total of 27 days. Brain homogenates from all groups were evaluated using biochemical marker measurements, which included gamma-aminobutyric acid (GABA), reduced glutathione (GSH), glutathione peroxidase (GPx1), tumor necrosis factor-alpha (TNF-α), interleukin-6 (IL-6), and interleukin-10 (IL-10).

Autism. Challenges and solutions
XII International Annual Conference & Exhibition
Abu Dhabi 2024

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Advances in Personalized Medicine to Treat Autism

Peter Lloyd-Thomas
peterlloydthomas@gmail.com
member of the Scientific Advisory Board of the Pitt Hopkins Research Foundation

ARTICLE INFO

Published on 5th of July 2024.
Doi:10.54878/00ms9920

KEYWORDS

Medicine, Treat Autism, Advances, autism diagnosis

HOW TO CITE

Advances in Personalized Medicine to Treat Autism. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

No drug has yet been approved to treat the core symptoms of autism. For over half a century attempts have been made to repurpose existing drugs to treat autism. Clinical trials go back to the 1970s. Even in these early "failed" trials there usually were those who responded to the treatment. Personalized medicine seeks to treat just one person and accepts that behind an autism diagnosis lie a myriad of possible dysfunctions. The usual attempts to find a one-size-fits-all therapy are doomed from the start. Great steps forward are possible be reevaluating the existing research and past clinical trials to identify a personalized polytherapy to treat cognitive dysfunction, aggression, lack of speech, sound sensitivity, anxiety, stereotypy and other problem areas. Each individual with severe autism should have their own polytherapy. Some elements will be lifelong, while others are likely to change as the child get older, approaches puberty and then adulthood. Autism is dynamic and new challenges may well appear and then therapy needs to be adjusted.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Treating Emotion Disregulation with Mindfulness: Mindfulness-Based Group Cognitive Therapy for Children with autism

Olessia Zmikhnovskaia
olessia_z@mail.ru
MA, CBT, clinical psychologist, behavior analyst

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/c710eq43

KEYWORDS

autism, children, emotion dysregulation (ED), Mindfulness-Based Cognitive Group Therapy, emotional processes

HOW TO CITE

Treating Emotion Disregulation with Mindfulness: Mindfulness-Based Group Cognitive Therapy for Children with autism. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Children with autism spectrum disorder experience behavioral and emotional symptoms hypothesized to arise from emotion dysregulation (ED), difficulty modulating emotional experience, expression, and intensity in an acceptable and contextually appropriate manner. Mindfulness-Based Cognitive Group Therapy for Children with ASD can be a valuable intervention for children with autism, because it allows them to better understand their emotional processes, helps them develop focus and self-regulation.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Genetic Frontiers in Autism: Unveiling New Paths for Diagnosis and Intervention

Dr. Noraldin Al-Deri
noraldin.alderi@eicadd.com
Precision Health Expert, Genetics & Ai, EICADD CENTERS

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/jyfxsp05

KEYWORDS

globally, developmental disorders, developmental challenges, autism, Diagnosis

HOW TO CITE

Genetic Frontiers in Autism: Unveiling New Paths for Diagnosis and Intervention. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

In this ground-breaking study, we unveil the first diagnostic protocol that leverages genetic testing for autism and developmental disorders in children. By meticulously analyzing genetic data from a cohort of 245 children with diverse developmental profiles, including neurotypical individuals, our research has revealed significant genetic underpinnings for various symptoms. Remarkably, the identification of preventable mutations suggests new avenues for intervention, emphasizing the critical role of non-heritable mutations in developmental challenges. The study provides novel insights into prevalent mutations regionally and globally, illustrating the impact of genetics on pediatric development. Supported by real-world case studies, our findings highlight the transformative potential of early genetic diagnosis in managing and potentially eradicating symptoms, marking a significant advancement towards personalized medicine in the field of pediatric developmental disorders.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

7P medicine as a new healthcare model in the context of management and treatment of children with ASD and other neurodevelopmental disorders

Dr.Natalia Ustinova
info@detiabc.ru
M.D., Ph.D., Head of Department of Social Pediatrics of Pediatrics Research Institute in Petrovsky National Centre of Surgery.Chief Researcher of the Center for Mental Health of Children and Adolescents

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/bh99yv96

KEYWORDS

autism spectrum disorders (ASD), diagnosis, health care, scientific research

HOW TO CITE

7P medicine as a new healthcare model in the context of management and treatment of children with ASD and other neurodevelopmental disorders. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Background: A significant increase in the prevalence of autism spectrum disorders (ASD) all over the world dictates the need to search for modern and effective methods of prevention, diagnosis and health care for such patients. At the same time, the results of numerous biomedical research in the field of autism are not reflected in real practical healthcare. Aims: Substantiation of a new model of health care for children with ASD. Materials and methods: The results of promising areas of autism research in the field of genetics, epigenetics, metabolomics, microbiome and multimorbidity, which marked a paradigm shift in the understanding of autism spectrum disorders, and requiring implementation in practice, are studied. Results: Based on the concept of 7P medicine (programming child development and health, preventive, predictive, personalized, participatory, multiprofessional, progressive), the necessity and possibility of implementing the results of scientific research into real clinical practice of managing children with autism are substantiated. Conclusion: The results of fundamental scientific research in the field of ASD, revealing their complex and multifaceted nature, allow us to talk about a paradigm shift in understanding this disorder Based on a new concept of medical care – 7P-medicine – the results of scientific research can be translated into real clinical practice, including diagnostic, therapeutic, preventive and rehabilitative effects on autism, as well as programming of the optimal trajectory of the cognitive-behavioral phenotype of children with neurodevelopmental disorders, including ASD.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Validation of plasma protein glycation and oxidation biomarkers for the diagnosis of autism

Professor Naila Rabbani
N.rabbani@qu.edu.qa
College of Medicine, QU Health, Qatar University

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/bthff139

KEYWORDS

Autism Spectrum Disorder (ASD), behavior-based, plasma protein glycation, mechanistic

HOW TO CITE

Validation of plasma protein glycation and oxidation biomarkers for the diagnosis of autism. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism Spectrum Disorder (ASD) is a common neurodevelopmental disorder in children. It is currently diagnosed by behavior-based assessments made by observation and interview. In 2018 we reported a discovery study of a blood biomarker diagnostic test for ASD based on a combination of four plasma protein glycation and oxidation adducts. The test had 88% accuracy in children 5 - 12 years old. Herein, we present an international multicenter clinical validation study (N = 478) with application of similar biomarkers to a wider age range of 1.5 - 12 years old children. Three hundred and eleven children with ASD (247 male, 64 females; age 5.2 ± 3.0 years) and 167 children with typical development (94 male, 73 female; 4.9 ± 2.4 years) were recruited for this study at Sidra Medicine and Hamad Medical Corporation hospitals, Qatar, and Hospital Regional Universitario de Málaga, Spain. For subjects 5 - 12 years old, the diagnostic algorithm with features, advanced glycation endproducts (AGEs) - Nε-carboxymethyl-lysine (CML), Nω-carboxymethylarginine (CMA) and 3-deoxyglucosone-derived hydroimidazolone (3DG-H), and oxidative damage marker, o,o'-dityrosine (DT), age and gender had accuracy 83% (CI 79 - 89%), sensitivity 94% (CI 90 - 98%), specificity 67% (CI 57 - 76%) and area-under-the-curve of receiver operating characteristic plot (AUROC) 0.87 (CI 0.84 - 0.90). Inclusion of addition plasma protein glycation and oxidation adducts increased the specificity to 74%. An algorithm with 12 plasma protein glycation and oxidation adduct features was optimum for children of 1.5 - 12 years old: accuracy 74% (CI 70 - 79%), sensitivity 75% (CI 63 - 87%), specificity 74% (CI 58 - 90%) and AUROC 0.79 (CI 0.74 - 0.84). We conclude that ASD diagnosis may be supported using an algorithm with features of plasma protein CML, CMA, 3DG-H and DT in 5 - 12 years-old children, and an algorithm with additional features applicable for ASD screening in younger children. ASD severity, as assessed by ADOS-2 score, correlated positively with plasma protein glycation adducts derived from methylglyoxal, hydroimidazolone MG-H1 and Nε(1-carboxyethyl) lysine (CEL). The successful validation herein may indicate that the algorithm modifiable features are mechanistic risk markers linking ASD to increased lipid peroxidation, neuronal plasticity and proteotoxic stress.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Fragile X syndrome and autism spectrum disorder: Is ASD in FXS 'true' ASD?

Nagwa A Meguid
meguidna@yahoo.com
UNESCO/ L'Oreal Laureate, Jury president UNESCO Women in Science.

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/x6rmyh42

KEYWORDS

syndrome and autism spectrum disorder (ASD), Egyptian, molecular diagnoses, CGG, autism

HOW TO CITE

Fragile X syndrome and autism spectrum disorder: Is ASD in FXS 'true' ASD?. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism & Fragile X syndrome are intertwined as they share some neurochemical similarities. Fragile X Syndrome (FXS) is the second cause of intellectual disability after Down syndrome and the most prevalent cause of intellectual disability in males. The actual worldwide prevalence is affecting 1:5000-7000 men and 1:4000-6000 women. In Egypt, the prevalence of FXS mutation among Egyptian males was 0.9 per 1000. Moreover, it was 6.4% among mentally subnormal males. ASD is a common comorbid condition in people with fragile X syndrome (FXS). Fragile X Syndrome is caused by an alteration of the FMR1 gene, which maps at the Xq27.3 band: more than 99% of individuals have a CGG expansion (>200 triplets) in the 5′ UTR of the gene, and FMR1 mutations and duplication/deletion are responsible for the remaining (<1%) molecular diagnoses of FXS. On the other hand, autism is a multifactorial polygenetic disorder. Given the relative high frequency of the condition and its complex clinical management, FXS appears to have an important economic and social burden. Here, we will present evidences from a variety of sources suggesting that there are important differences in ASD symptoms, behavioral and psychiatric correlates, and developmental trajectories between individuals with comorbid FXS and ASD and those with non-syndromic ASD. "Is ASD in FXS 'true' ASD?". Answering this question is critically important, because of recent claims that targeted pharmaceutical treatments found to be efficacious for core symptoms of FXS are likely to be beneficial for individuals with non-syndromic ASD as well. The aim of this review relying on our previous studies & publications was to gather the current clinical, associated co-morbidities and molecular knowledge about FXS compared to autism population to provide clinicians with a tool to guide the initial assessment and follow-up of FXS. This will offer an update about the current diagnostic procedures to laboratory workers and researchers. In conclusion, neurobiological substrates of the behavioral impairments, including those reflecting core ASD symptoms, are different in FXS and non-syndromic ASD. We still believe that the study of FXS can provide insights into non-syndromic ASD. Proper diagnosis can help to follow the transmission pattern of the CGG repeats to give correct genetic counseling.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

The Heart of Service Delivery: Creating Connected Relationships

Megan Miller
megan-miller@dobettercollective.us
Chief Clinical Officer of DoBetter Collective

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/z7vq0d82

KEYWORDS

heart of service, creating a positive, science, technical

HOW TO CITE

The Heart of Service Delivery: Creating Connected Relationships. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

At the intersection of technical precision and compassionate care lies the heart of service delivery. Join Dr. Megan DeLeon in this captivating presentation as we unravel the significance of creating meaningful connections with our clients. While we excel in crafting impeccable intervention plans, let's not overlook the pivotal role of rapport building. Dr. Megan DeLeon, a leading expert in the field, draws from her extensive research and experience to unveil strategies that will empower you to cultivate and fortify trusting and connected teaching relationships with your clients. • Explore the art of creating a positive first experience during the initial stages of intervention, setting the stage for trust and collaboration. Delve into the science behind building trust over time, nurturing relationships that stand the test of time. • Witness the transformative power of collaboration between behavior analysts and clients, fostering an environment of shared growth. Walk away from this enlightening presentation armed with practical insights and real-world examples that can be seamlessly integrated into your work with individuals of all ages—children, adolescents, and adults alike.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

CTRP3 as a novel biomarker in the plasma of Saudi children with autism

Manan Alhakbany
malhakbany@gmail.com
Department of Physiology, Faculty of Medicine, King Saud University, Riyadh, Saudi Arabia.

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/jtyx5b27

KEYWORDS

Autism spectrum disorder; Biomarker; C1q/tumor necrosis factor (TNF)-related protein (CTRP3), Childhood autism rating scale; Receiver operating characteristic (ROC)

HOW TO CITE

CTRP3 as a novel biomarker in the plasma of Saudi children with autism. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Background: C1q/tumor necrosis factor-related protein-3 (CTRP3) has diverse functions: anti-inflammation, metabolic regulation, and protection against endothelial dysfunction.Methods: The plasma level of CTRP3 in autistic patients (n = 32) was compared to that in controls (n = 37) using ELISA. Results: CTRP3 was higher (24.7% with $P < 0.05$) in autistic patients than in controls. No association was observed between CTRP3 and the severity of the disorder using the Childhood Autism Rating Scale (CARS). A positive correlation between CARs and the age of patients was reported. Receiver operating characteristic (ROC) analysis demonstrated a low area under the curve (AUC) for all patients (0.636). Low AUCs were also found in the case of severe patients (0.659) compared to controls, but both values were statistically significant ($P \leq 0.05$). Despite the small sample size, we are the first to find an association between CTRP3 and autism spectrum disorder (ASD).

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

ANRC Guidelines for Comprehensive Nutritional Support for Autism

James Adams
Jim.adams@asu.edu
Professor, Director of the Autism/Asperger's Research Program at Arizona State University, President of the Autism Society of Greater Phoenix

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/dtb9pw43

KEYWORDS:

self-limited, autism, nutritional, Comprehensive

HOW TO CITE

ANRC Guidelines for Comprehensive Nutritional Support for Autism. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Children and adults with autism often have self-limited diets with insufficient intake of vegetables, fruit, protein, and essential fatty acids. Also, due to metabolic differences, they often need additional nutritional support. This presentation will summarize the positive results of several randomized clinical trials of a special vitamin/mineral/micronutrient supplement for autism, and the positive results of a comprehensive nutritional support study involving vitamins/minerals/micronutrients, fish oil, Epsom salts, carnitine, digestive enzymes, and a healthy allergen-free diet. The results of those studies resulted in the ANRC Guidelines for Comprehensive Nutritional Support, available from the Autism Nutrition Research Center

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Importance of cross-department cooperation in pediatric medical services around ASD. Neurology and otolaryngology fall flat being separated: case of the clinic.

Igor Efimov
9343404@mail.ru
Chief Medical Officer, Sankt-Peterburg, Russia

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/mt6m6w54

KEYWORDS:

The Autism Spectrum Disorders (ASD), cross-department, Neurology

HOW TO CITE

Importance of cross-department cooperation in pediatric medical services around ASD. Neurology and otolaryngology fall flat being separated: case of the clinic. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

The Autism Spectrum Disorders (ASD) are a heterogeneous group of developmental abnormalities, with clinical appearance in neurological, otolaryngological, and general pediatric deficits. For many years, using extended hearing examination approach, which includes otoscopy, tympanometry, otoacoustical emission, auditory brainstem response (short-latency evoked potentials), multi-ASSR evoked potentials (auditory steady-state response) we postulated that classical professional otolaryngological approach is completely unapplicable to children with ASD. Since 2018 only in one clinic we registered 2404 (on the date 19th January 2024) multi-ASSR responses in children with speech delay and ASD. It turned up in 938 (~39%) diagnosed incomplete hearing loss and otolaryngological problems (including interfered cases). Problems in auditory processing has even greater percentile, but it is uncounted in the view strugling of finding correct criteria. In research guided by Efimova Viktoria, Nikolaeva Elena, Frolovskaya Olga 495 children were examined (245 - ASD, 250 - speech delay) using correlation analysis which showed a connection between the diagnosis of autism and the perception of frequencies of 500 Hz right (r=0.436), 500 Hz left (r=0.238), 2000 Hz right (r=0.355), 4000 Hz right (r=0.390). Therefore, the diagnosis of autism is associated with the perception of frequencies studied, in mainly on the right, that is, going to the left hemisphere. Summarizing our experience of last 10 years, we manifest that full hearing examination and ASD-orientated otolaryngological examination crucially important in and autism-related medical center.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Omega-3 fatty acid supplementation in autism spectrum disorder is there a benefit: An unanswered question? we can answer together

Prof. Hanan A Alfawaz
hanan2211@gmail.com
Professor of Nutrition & Metabolism; Food Science & Nutrition Department at King Saud University (Saudi Arabia)

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/80n3vg94

KEYWORDS:

Autism spectrum disorder (ASD), acid supplementation, DHA, multidisciplinary

HOW TO CITE

Omega-3 fatty acid supplementation in autism spectrum disorder is there a benefit: An unanswered question? we can answer together. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism spectrum disorder (ASD) is a well-known neurodevelopmental illness with significant medical variance. There is controversy surrounding the effectiveness of omega-3 supplementation as an evidence-based treatment of symptoms of ASD. The link between autism and nutrition also opens up the possibility of early dietary intervention that could protect against the development of autism or prevent autism symptoms. This idea opens up exciting new avenues for research into dietary supplement therapy, which may improve the quality of life for people with autism and their families. Epidemiological studies show an increasing trend in the annual prevalence of ASD with a prevalence of four to five times more in boys than girls. The average prevalence of ASD in Asia, Europe and North America is estimated at 1%, with a prevalence of 0.14 to 2.9% in the Arab countries around Arabian gulf. 1 in 36 eight years old were identified in ASD in 2020.in animals and human studies show the antioxidant effect of ω3-PUFAs.ther are conflict of the effect of omega 3 in autistic children. A systematic review by Qawasmi et al ,2011 identified that omega-3 supplementation improved attention deficiency and hyperactivity in children with autism. In the line Omega-3 treatment decreased hyperactivity and stereotyped behavior, according to Amminger et al. investigation on omega-3 fatty acid supplementation in autistic children. Another study found that giving children with ASD an omega-3 supplement for 12 weeks reduced their hyperactivity. The relationship between maternal dietary fat intake before or during pregnancy and ASD in children was studied by Lyall et al. found that maternal linoleic acid consumption was strongly linked to an increased incidence of ASD. Finding of ElAnsary et al., indicated that autistic children plasma fatty acid concentrations had altered, with an increase in saturated fatty acids other than propionic acid and a decrease in PUFA. Children at risk for ASD had better language development after receiving omega-3 and omega-6 supplements for three months.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Precision microbial intervention improves social behavior in autistic children

Elisabetta Volpe
e.volpe@hsantalucia.it
Post-doc researcher of immunology at the Curie Institute (Paris, France)

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/x5hh8294

KEYWORDS

improves, social behavior, autistic children, autism spectrum disorder (ASD)

HOW TO CITE

Precision microbial intervention improves social behavior in autistic children. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Treatments for Autism spectrum disorder (ASD), which is characterized by impairments in social interaction, deficits in communication and the presence of restricted/repetitive behaviors, remain elusive. The gut-microbiota-brain axis is an emerging potential new therapeutic target. Specifically, preclinical studies show that L. reuteri selectively reversed social deficits in several models of ASD. In a double-blind, randomized, placebo-controlled trial, we found that a combination of Lactobacillus strains did not alter overall autism severity or restricted/repetitive behaviors, but considerably improved social functioning across different measures in children with ASD. Intriguingly, we found that the prosocial effect of probiotic treatment was strain-specific in a preclinical ASD mouse model. Collectively, our findings indicate that probiotic treatment improves social behavior in ASD children, thereby warranting larger trials. Moreover, we analyzed several biological factors, such as microbiome composition or immune profile, and we performed correlative studies with behavioral improvement to find potential factors associated with probiotic response.These correlative studies are helpful for improving diagnosis and treatment. In fact, our results offer potential as biomarkers to reduce the diagnostic heterogeneity, and improve the prediction of treatment response.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Genetic and pathogenic overlaps between autism and Alzheimer's disease: opportunities for drug repurposing

Ekaterina Trifonova
Trifonova.k@rambler.ru
Federal Research Center Institute of Cytology and Genetics SB RAS

ARTICLE INFO

Published on 5th of July 2024
Doi: 10.54878/z3yj8882

KEYWORDS
Autism spectrum disorder (ASD), neurodegenerative disorders, Genetic

HOW TO CITE

Genetic and pathogenic overlaps between autism and Alzheimer's disease: opportunities for drug repurposing. (2024). *Autism Challenges and Solutions*, *2*(1)

ABSTRACT

Autism spectrum disorder (ASD) and Alzheimer's disease (AD) are neurodevelopmental and neurodegenerative disorders respectively that share common clinical features, such as language impairment, executive functions, and cognitive problems. Proteomic analysis of autism and Alzheimer's mouse models reveal common alterations in mTOR signaling pathway. Alterations in the mTOR signaling pathway during critical stage of development could lead to improper connectivity in the brain, which play a role in the pathogenesis of ASD. At the same time mTOR inhibitor rapamycin has been shown to prevent (and possibly restore in some cases) the memory deficit in the mouse model of Alzheimer's disease as well as reduce Aβ and tau aggregation, and reduce microglia activation. We conducted a bioinformatic analysis of signaling pathways for sets of genes for ASD and Alzheimer's disease: sets of genes predisposing to ASD (from the SFARI database) and to AD have 148 common genes, 75 of them are directly related to mTOR. We have constructed and analyzed gene networks reflecting the relationship of ASD and AD with innate immunity and autoimmune diseases. The genes with the largest number of connections have been identified: CTNNB1, CREBBP, TRAF2, HDAC1, HDAC2, etc., which may be targets for therapy. Based on a large percentage of mTOR-related ASD and AD genes, we searched for mTOR molulators used in AD therapy with potential for ASD therapy. To do this, using ANDVisio tools, networks were built based on three fragments of the mTOR path: PI3K/Akt, Ras and p38 MAPK. We have proposed several pharmacological mTOR modulators already used in AD therapy, which have the potential for ASD.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Dental Management of children with ASD

Dr. Ebtissam Murshid
ezmurshid@hotmail.com
Professor and Consultant of Pediatric Dentistry at King Saud University, Riyadh. Kingdom of Saudi Arabia

ARTICLE INFO

Published on 5th of July 2024
Doi: 10.54878/kkte0849

KEYWORDS:

Oral Hygiene, Autism Spectrum Disorder (ASD), ADHD, pediatric

HOW TO CITE

Dental Management of children with ASDDental Management of children with ASD. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism Spectrum Disorder (ASD) is a broad term used to define a multiple neuro-developmental disorder that affects children as early as 1-3 years of age. Children and young people with ASD frequently experience a range of cognitive (thinking), learning, emotional and behavioral disorders. The majority have attention deficit hyperactivity disorder (ADHD), anxiety, seizures, mental and social deficiencies with extremely poor Oral Hygiene and underserved dental services. Treating patients with ASD is considered one of the greatest challenges for dentists in general and pediatric dentists in specific.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Advancing Inclusion: Autism Perspectives in Lebanon and Jordan

Christine DerSarkissian
c.d.sarkissian@gmail.com
Behavior Analyst. Co-founder of EBISA Center in Lebanon and the International Autism Expert at Autism MENA (AMENA) Training ABD Professional Development Institute

ARTICLE INFO

Published on 5th of July 2024
Doi: 10.54878/t5y3va34

KEYWORDS

Middle Eastern, Autism Spectrum Disorder (ASD), non-governmental organizations, global communities

HOW TO CITE

Advancing Inclusion: Autism Perspectives in Lebanon and Jordan. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

The inclusion of individuals with Autism Spectrum Disorder (ASD) remains a pivotal yet challenging endeavor in global communities at all ages. This abstract shed light on the specific contexts of Lebanon and Jordan, two Middle Eastern nations striving to foster inclusive environments for individuals with ASD. Despite varying socio-cultural landscapes, both countries encounter similar barriers and exhibit promising initiatives towards inclusivity. In Lebanon, the journey towards autism inclusion intersects with multifaceted challenges stemming from socio-economic disparities, limited access to specialized services, and societal stigma. Nonetheless, grassroots efforts, bolstered by the commitment of advocacy groups, behavior analysts and educators, are reshaping perceptions and paving the way for inclusive practices in educational settings and societal integration. Conversely, Jordan grapples with comparable hurdles in its pursuit of autism inclusion. While governmental support and policy frameworks lay foundations for progress, gaps in implementation and resource allocation persist. Collaborative ventures between governmental bodies, non-governmental organizations, and the private sector underscore a burgeoning movement towards inclusive education and employment opportunities, signaling a shift towards a more inclusive society.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Zinc Deficiency and Autism - From cellular mechanisms to clinical studies - an update

Andreas M. Grabrucker
andreas.grabrucker@ul.ie
Cellular Neurobiology and Neuro-Nanotechnology lab, Dept. of Biological Sciences, University of Limerick, Limerick, Ireland

ARTICLE INFO

Published on 7th of June 2024.
Doi: 10.54878/r4dyxe73

KEYWORDS

Zinc, Zinc Deficiency, Neurodevelopmental Disorders, Gene Expression

HOW TO CITE

Zinc Deficiency and Autism – From cellular mechanisms to clinical studies – an update. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Zinc is a versatile element crucial in various biological processes, including gene expression, cell division, and enzymatic reactions. In recent years, zinc has gained increasing attention as a potential regulator of healthy brain development. Zinc deficiency, in turn, was linked to neurodevelopmental disorders like autism spectrum disorder (ASD). Our studies showed that genetic and environmental factors, such as prenatal zinc deficiency, seem to converge on a neurobiological process determining the characteristic ASD-linked behaviors. One critical convergence point is synaptic vesicle release and recycling. This process is influenced by gut-brain signaling. We could show that compromised gastrointestinal barrier tightness (leaky gut) is zinc status-dependent and that pro-inflammatory processes in the gut trigger neuroinflammation. This talk summarizes our most recent findings on how zinc deficiency contributes to abnormal brain function via the microbiota-gut-brain axis mechanistically at cellular and organ levels. In particular, astrocyte activation by zinc deficiency is a novel finding that will be highlighted. Further, new data from recent clinical trials using zinc supplementation in pregnant women will show that findings from cell and animal models can be translated into human studies, with the effects of zinc supplementation on microbiota and inflammatory status in participants. Thus, for the first time, we can span the bridge from the cellular functions of zinc to its effects on human health in the context of ASD.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Trace elements and minerals in autism spectrum disorder theranostics

Prof. Anatoly V. Skalny
skalny3@gmail.com
MD, PhD, DSc, prof.

ARTICLE INFO

Published on 7th June 2024
Doi: 10.54878/1k7zzm36

KEYWORDS

Trace Elements, Mineral Metabolism, Disease Severity, Metabolic Profile

HOW TO CITE

Trace elements and minerals in autism spectrum disorder theranostics. (2024). *Autism Challenges and Solutions,* 2(1).

ABSTRACT

The objective of a series of studies was to evaluate trace element and mineral metabolism in children with autism spectrum disorder (ASD) in relation to disease severity, and metabolic profile to estimate the potential therapeutic targets. More than 2000 children with ASD and 2000 sex- and age-matched controls were examined. We revealed low serum Zn, increased Cu/Zn ratio, low Mg, increased serum Se, Fe, and Mn in the Russian children with ASD, whereas in hair a trend to reduced trace element levels was observed. In Russian children with ASD no significant increase in toxic metal body burden, whereas in the examined cases from Saudi Arabia and Taiwan the levels of toxic metals including Hg and Pb exceeded the control values. Different patterns of metal accumulation in children with ASD from different regions may be at least partially mediated by polymorphisms in genes involved in detoxification processes. Multiple regression analysis revealed a significant association between the presence of psychopath-like syndrome and serum Fe and hair Fe (inverse), speech development delay and hair Cu and serum Co (positive), infantile psychosis and hair Zn content (inverse). The association between metal(loid) and trace element levels in autism and catatonia was also revealed. The levels of trace elements and minerals in hair and serum was associated with CARS values. We also revealed a significant relationship between serum trace element and mineral levels with neuroinflammatory markers. It has been demonstrated that Mg levels were characterized by inverse, whereas that of Fe and heavy metals, especially Cd, by direct association with neuroinflammation in ASD patients. Furthermore, a significant association between circulating trace elements and amino acid levels was observed, with the most profound relationship between hydroxyproline, Se (negative) and As (positive), phosphoserine, Se and Co (positive), taurine, Cr (positive) and Fe (negative), as well as glutamate/glutamine ratio with Mn and Mg. These findings demonstrate that impaired trace element and mineral metabolism in children with ASD may significantly contribute to neurotransmitter dysregulation, neuroinflammation, and connective tissue pathology, altogether resulting in the relation with clinical severity of ASD. The obtained data was used for development of predictive models for evaluation of disease severity.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Psychopharmacology in children and adolescents: unmet needs and opportunities

Prof. Antonio M. Persico
antonio.persico@unimore.it
Department of Biomedical, Metabolic and Neurosciences University of Modena and Reggio Emilia, Italy

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/1an21347

KEYWORDS:

children, health conditions, mental health

HOW TO CITE

Psychopharmacology in children and adolescents: unmet needs and opportunities. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Psychopharmacological treatment is an important component of the multimodal intervention approach to treating mental health conditions in children and adolescents. Currently, there are many unmet needs but also opportunities, alongside possible risks to consider, regarding the pharmacological treatment of mental health conditions in children and adolescents. In this Position Paper, we highlight and address these unmet needs and opportunities, including the perspectives of clinicians and researchers from the European College of Neuropsychopharmacology-Child and Adolescent Network, alongside those of experts by lived experience from national and international associations, via a survey involving 644 participants from 13 countries, and of regulators, through representation from the European Medicines Agency. We present and discuss the evidence base for medications currently used for mental disorders in children and adolescents, medications in the pipeline, opportunities in the development of novel medications, crucial priorities for the conduct of future clinical studies, challenges and opportunities in terms of the regulatory and legislative framework, and innovations in the way research is conducted, reported, and promoted.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Diving dipper into error correction procedures in ABA, their pros and cons

Dr. Antonina Shangraw
abaconsultations@gmail.com
Clinical Director of Positive Behavioral Services of the Four Corners (USA)

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/7raf2245

KEYWORDS:

ABA therapy, Applied Behavior Analysis (ABA), Error correction

HOW TO CITE

Diving dipper into error correction procedures in ABA, their pros and cons. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

This presentation delves into the intricate landscape of error correction procedures within Applied Behavior Analysis (ABA). Error correction procedures play a pivotal role in the efficacy of ABA interventions, aiming to address and rectify errors made during the learning process. The presentation will look deeper into different error correction techniques, including prompt fading, errorless learning, and differential strategies of error correction. By exploring the nuanced area of error correction procedures, this presentation aims to offer insights into optimizing ABA practices while considering the unique characteristics and needs of each learner. Furthermore, the discussion will evaluate the pros and cons of using various error correction procedures within the framework of ABA interventions. While some techniques may foster rapid skill acquisition and reduce instances of errors, they might inadvertently impede the development of independent problem-solving skills and hinder generalization across different contexts. Conversely, other strategies, although promoting independence and generalization, may entail a slower learning curve and necessitate more extensive time and resources. By carefully weighing the advantages and disadvantages of each error correction approach, this presentation will help practitioners with the knowledge and understanding needed to develop ABA interventions effectively to meet the unique needs and goals of individuals in ABA therapy

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Longitudinal developmental trajectories of young autistic children: influence of culture, diet, pretend play, and various activities

Andrey Vyshedskiy
Vysha@bu.edu
Boston University, Boston, MA 02215, USA

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/wn55g819

KEYWORDS:

developmental, ASD, activities, improvement, children

HOW TO CITE

Longitudinal developmental trajectories of young autistic children: influence of culture, diet, pretend play, and various activities. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Humans are extremely sensitive to cultural circumstances of their early childhood. In a series of studies, we explored the developmental trajectories of children with autism over a span of three years, focusing on five outcome measures reported by parents: language comprehension, expressive language, sociability, sensory awareness, and overall health. In a study of diet and food consumption (N= 5,553), gluten-free diet was associated with 1.5-fold greater improvement of language comprehension ($p < 0.0001$) 1; meat- and eggs-eating was associated with 1.6-fold greater improvement of language comprehension ($p < 0.0001$); vegetable-eating was associated with 1.5-fold greater improvement of language comprehension ($p < 0.0001$) and 1.2-times greater improvement of expressive language ($p = 0.0137$). Consumption of fast carbohydrates - sweets and bread - was associated with a significant and consistent health score decline ($p < 0.0001$) 1. In a study investigating the effect of passive video and television watching (N= 3,227), shorter video and television watching were associated with 1.4-fold greater improvement in language comprehension ($p = 0.0128$) 2. In a study of the effect of pretend play (N= 7,069), pretend play was associated with 1.9-fold greater improvement of language comprehension ($p < 0.0001$) and 1.4-fold greater improvement of expressive language ($p < 0.0001$) 3. In a study of the effect of joint-engagement (N=12,081), high joint-engagement was associated with 1.4-times greater improvement of language comprehension ($p = 0.0019$), 1.5-times greater improvement of expressive language ($p < 0.0001$), and 1.5-times greater improvement of sensory awareness ($p = 0.0248$) 4. In a study of the effect of sleep (N=8,540), moderate and severe sleep problems were associated with significant health decline ($p < 0.0001$) and lower sociability improvement ($p = 0.0426$) 5. In a study of the effect of a gamified language comprehension exercise (N=6,454), engaging with the exercises was associated with 2.2-times greater improvement of language comprehension ($p < 0.0001$) and 1.4-tiems greater improvement of expressive language ($p = 0.0144$) 6. In a study of language acquisition critical period, autistic children learning-rate declined exponentially several years earlier than in typical children, (N=15,183). The short language acquisition critical period makes autistic children especially vulnerable to the impact of early experiences.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Mitochondrial abnormalities and oxidative stress in Autism: Impact of genetic and environmental factors

Abha Chauhan
abha.chauhan@opwdd.ny.gov
NYS Institute for Basic Research in Developmental Disabilities, Staten Island, New York, USA

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/ka5dyf24

KEYWORDS:

Neurodevelopmental Disorder, Oxidative Stress, Mitochondrial Dysfunction, Reactive Oxygen Species (ROS)

HOW TO CITE

Mitochondrial abnormalities and oxidative stress in Autism: Impact of genetic and environmental factors. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism is a neurodevelopmental disorder associated with social deficits and behavioral abnormalities. According to the Centers for Disease Control and Prevention (CDC), 1 in 36 children is affected with autism in the United States. Accumulating evidence suggests that oxidative stress and mitochondrial dysfunction may provide a link between susceptibility genes and pre- and post-natal environmental risk factors in the pathophysiology of autism. The free radicals, i.e., reactive oxygen species (ROS) are generated endogenously during oxidative metabolism and energy (ATP) production by mitochondria. We compared the status of ROS-mediated oxidative damage, glutathione antioxidant status, monoamine oxidase A (MAOA) activity, as well as mitochondrial functions assessed by studying expression and activities of mitochondrial electron transport chain (ETC) complexes and pyruvate dehydrogenase (PDH), as well as mitochondrial biogenesis in postmortem brain tissue samples from the cerebellum and frontal, temporal, parietal and occipital cortices of autistic subjects and age-matched normal subjects. In the cerebellum, frontal cortex, and temporal cortex of subjects with autism, the oxidation of lipid, protein and DNA was increased, glutathione antioxidant defense was impaired, and mitochondrial ETC complexes (I, III and V) and PDH were decreased as compared with age-matched controls. On the other hand, parietal and occipital cortices were unaffected in autism. In addition, MAOA activity was lower that can explain elevated levels of related neurotransmitters such as serotonin in autism. The mitochondrial biogenesis was impaired in the brain of subjects with autism. The high energy demand of the developing brain, thus, may trigger a cascade of structural and functional changes leading to the autistic phenotype if mitochondrial functions are impaired and the energy need of the brain is not fulfilled. In this presentation, the potential role of genetic and environmental factors (such as bisphenol A) in increasing the vulnerability to oxidative stress and mitochondrial abnormalities in autism will also be discussed.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Diet change and microglia ablation of MeCP2e1 deficient mice affect the Rett-like disease symptoms in a sex-dependent manner.

Abdullah M Madany
ammadany@ucdavis.edu
Postdoctoral Scholar UC Davis School of Medicine Medical Microbiology & Immunology.

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/ngypmt68

KEYWORDS:

ASD, Autism, MeCP2e1, Rett syndrome (RTT)

HOW TO CITE

Diet change and microglia ablation of MeCP2e1 deficient mice affect the Rett-like disease symptoms in a sex-dependent manner. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Rett syndrome (RTT) is a complex neurodevelopmental disorder that occurs in 1 in 10,000 births. Approximately 95% of RTT patients are females heterozygous for the X-linked gene methyl CpG binding protein 2 (MECP2) mutations. They are thus mosaic for wild-type and mutant MECP2 expression at a cellular level. RTT has symptoms similar to autism spectrum disorder (ASD) and is usually confirmed with genetic testing following an ASD diagnosis. Typical brain development requires MECP2-encoded MeCP2e1. Analysis of our MeCP2e1 deficient mouse model suggests that microglia contribute to RTT-like gait defects, gut microbiome, and metabolic changes, as activated microglia have been shown to accelerate disease progression. Thus, we hypothesized that pre-symptomatic pharmacologic ablation of microglia would ameliorate RTT-like phenotypes in MeCP2e1 mutant mice. Therefore, PLX3397 a CSF1R/c-kit inhibitor dissolved in a purified AIN-76A chow at 290 PPM was orally administered to wild-type and mutant mice, either acutely for 2 weeks (from 4-6 weeks of age) or chronically for 19 weeks (from 4-23 weeks of age) to ablate microglia in their brains and compared to vehicle controls. Untreated mice on the standard mouse diet were also compared to the vehicle control. The wild-type and Mecp2e1 mutant littermates were weekly weighed and scored for neuro-phenotypes. Gait, fecal cytokines, fecal short-chain fatty acids, and gut microbial composition were assessed in all mice before, during, and after disease onset. Surprisingly, neither acute nor chronic PLX3397 treatment significantly reduced neuro-phenotype scores in either mutant females or mutant male mice. Instead, chronic PLX3397 treatment significantly elevated disease severity in mutant females compared to mutant vehicle controls. However, chronic PLX3397 treatment significantly reduced weight gain over time in wild-type and mutant males compared to male vehicle controls but not in wild-type or mutant females compared to female vehicle controls.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Exploring Seizures in Autism: What You Need to Know

Dr. Abdulla Alawadhi

Abdulla.alawadhi1@dubaihealth.ae

Pediatric neurologist, Al Jalila Children's Specialty Hospital (UAE)

ARTICLE INFO

Published on 5th of July 2024.
Doi: 10.54878/2vhsw303

KEYWORDS:

autism, treatment, epilepsy ASD

HOW TO CITE

Exploring Seizures in Autism: What You Need to Know. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism Spectrum Disorder (ASD) is a complex condition that affects how individuals interact, communicate, and engage in repetitive behaviors. Many individuals with ASD also experience seizures, contributing to the diverse nature of the disorder. This presentation aims to explore the connection between epilepsy and ASD, taking a comprehensive look at the definitions and criteria of epilepsy. It will delve into the prevalence of epilepsy among those with ASD, discussing key factors influencing their co-occurrence. The talk will also address the neuropathological mechanisms in the brain behind seizures in autism. Additionally, it will offer insights into recognizing different seizure types and practical advice on when to use EEGs for accurate diagnosis. This will be followed by an exploration of antiepileptic drugs and their role in tailored treatment strategies for epilepsy within the intricate context of autism.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Comparison of Sedentary Behavior and Physical Activity between Children with Autism Spectrum Disorder (ASD) and the Controls

Prof. Abdulrahman Alhowikan
Ahowikan@ksu.edu.sa
Professor - Chairman of Physiology department, Clinical Exercise Physiology, Collage of medicine, King Saud University

ARTICLE INFO

Published on 5th of July 2024
Doi: 10.54878/a21b6825

KEYWORDS:

autism spectrum disorder; physical activity; sedentary behavior; ActiGraph monitor; neurochemistry

HOW TO CITE

Comparison of Sedentary Behavior and Physical Activity between Children with Autism Spectrum Disorder (ASD) and the Controls. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Many health organizations and scientific associations agree that physical activity (PA) improves children and youth's overall quality of life and offers essential health benefits [1],[2], and they advise engaging in moderate-to-vigorous PA for at least 60 minutes each day. [3] Lowered levels of PA are thought to put children and young people with disabilities at higher risk of obesity. The assessment of physical activity level required continue follow up , therefor ActiGraph monitor (GT3X+), which records kids' entire body movements and unstructured play activities like standing, sitting, walking, climbing stairs, running, and cycling. Actigraph accelerometers are thought to be reliable tools for determining kids' sedentary time and physical activity time because they can measure a kid's orientation and immature motor movements with accuracy.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Farm Animal-assisted Neurotherapy for Autism Spectrum and other Neurodiverse Conditions

Susan D. Rich
dr.sdrich@gmail.com
MD, MPH, DFAPA; 7th Generation Foundation, Inc.

ARTICLE INFO

Published on 6th of June 2024.
Doi: 10.54878/rnp9s880

KEYWORDS

Autism Spectrum Disorder, Neurodiversity, Neurodevelopmental Disorders, Adverse Childhood Experiences, Trauma-informed Therapy, Farm animal assisted therapy, Neurotherapy, Green Care, Farming for Health

HOW TO CITE

Farm Animal-assisted Neurotherapy for Autism Spectrum and other Neurodiverse Conditions. (n.d.). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Farm animal assisted therapy is a novel approach to treat autism spectrum disorder (ASD) and other neurodiverse conditions (NDC) and may help rewire brain circuits through entrainment with the gentle sounds and rhythms of a working farm. Multiple, complex etiologies for ASD/NDC include epigenetics, genetics, preconceptional/prenatal/perinatal issues and early life experiences, as well as alterations in the gut-brain microbiota. Traditional psychotherapy is challenging, even for higher functioning individuals with ASD/NDC, due to difficulties with insight, attachment-related transference problems, or metacognitive skills. Neurodiverse adolescents may become more socially disenfranchised, reclusive, oppositional, defiant, noncompliant, and isolated from peer groups. For many teens with ASD/NDC, communication issues, sensory disintegration, executive dysfunctions, and emotional dysregulation make it difficult for them to adapt to the expectations and pressures of school, home and the community, leading to vulnerability to psychosis during transition years.This presentation will explain farm animal assisted therapy as a type of neurotherapy on a sanctuary for orphaned, injured and rescued farm animals, Dream Catcher Meadows. Historical and clinical perspectives provide the context for farm animal assisted neurotherapy and green care farming within a comprehensive array of school, home, and community interventions. Farms provide rich opportunities for language development, executive functions, sensory desensitization, skill development, fine/gross motor development, and parent-child bonding and theoretically improve the gut microbiome through access to a more diverse range of microbes. Green care social activities can help develop a sense of community, meaning and purpose as well as adaptive functions for children and teens with ASD/NDC. A range of techniques model empathy, compassion, theory of mind concepts, social communication/perception, and self-regulation through mindfulness, interspecies bonding, and entrainment. The history of Dream Catcher Meadows and case discussions from clinical practice elaborate therapeutic perspectives, augmented by session scenarios and non-clinical photographs.

.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Bioactive lipids in the prevention and management of autism

Undurti N. Das
undurti@hotmail.com
UND Life Sciences, 2221 NW 5th St, Battle ground, WA 98604, USA

ARTICLE INFO

Published on 9th of June 2024.
Doi: 10.54878/cxgwsj21

KEYWORDS

Autism Spectrum Disorder (ASD), Neurodevelopmental Disorder, Genetic Factors, Epigenetic Factors

HOW TO CITE

Bioactive lipids in the prevention and management of autism. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism is a neurodevelopmental disorder in which both genetic and epigenetic factors have a role. Studies revealed that autism is associated with low-grade systemic inflammation with a role for altered essential fatty acid (EFA) metabolism and brain-derived neurotrophic factor (BDNF). Increased concentrations of cytokines IL-6, TNF-α have been described in the amniotic fluid and plasma of the mother and the newborn. BDNF levels tend to be low in those with autism. Decreased concentrations of bioactive lipids such as arachidonic acid (AA), eicosapentaenoic acid (EPA) and docosahexaenoic acid and its anti-inflammatory metabolites such as lipoxin A4 (LXA4) are low in those with autism and in their mothers. We showed that BDNF enhances LXA4 and LXA4 in turn augments BDNF formation suggesting a close interaction between lipids and neurotrophic factors. AA, EPA, and DHA are essential for neuronal growth and synaptic formation and BDNF is an essential neurotrophic factor. AA and DHA improve brain growth and development and improve IQ. Furthermore, these bioactive lipids regulate formation and actions of neurotransmitters: dopamine, serotonin, acetylcholine, GABA (gamma-aminobutyric acid) and catecholamines, and growth factors Hence, administration of AA/EPA/DHA when brain growth and development is occurring may prevent autism. The challenge is to administer bioactive lipids in appropriate amounts to the developing brain. CSF flows from the ventricles throughout the parenchyma towards the subarachnoid space. This transependymal flow of CSF provides a route to distribute ICV-infused drugs throughout the brain. Thus, methods can be developed to infuse bioactive lipids using transependymal CSF flow and thus, prevent and manage autism and other related conditions.

.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Breaking Down Early Learner Skills

Steve Ward
Steveandterry35@yahoo.com
Whole Child Consulting

ARTICLE INFO

Published on 6th May 2024 Doi: 10.54878/bfzhj287

KEYWORDS

Early Learning Targets, Matching Objects, Imitation

HOW TO CITE

Breaking Down Early Learner Skills. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Can your learner match objects, imitate gross motor movements, and follow simple directions, such as "stomp feet"? If so, great! You may be in position to introduce some more advanced targets. If these early targets are elusive, you are not alone! Many learners struggle with these "early" targets and, rather than continuing to trudge through them, teachers can help their learners by recognizing the foundations and prerequisites of these popular targets. This paper will help in that process by introducing component-composite analyses, including learning channels and by providing concrete examples of how to strengthen these early learner repertoires.

.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Corneal confocal microscopy demonstrates corneal nerve loss in children with autism spectrum disorder.

Rayaz Malik
ram2045@qatar-med.cornell.edu
Weill Cornell Medicine-Qatar

ARTICLE INFO

Published on 6th June 2024
Doi:10.54878/0xt4cc17

KEYWORDS

Developmental Disorder, Communication Difficulty, Interaction Difficulty, Cerebral Neuronal Loss

HOW TO CITE

Corneal confocal microscopy demonstrates corneal nerve loss in children with autism spectrum disorder. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism spectrum disorder (ASD) is a developmental disorder characterized by difficulty in communication and interaction with others. Postmortem studies have shown cerebral neuronal loss and neuroimaging studies show neuronal loss in the amygdala, cerebellum and inter-hemispheric regions of the brain. Recent studies have shown altered tactile discrimination, and allodynia on the face, mouth, hands and feet and intraepidermal nerve fiber loss in the legs of subjects with ASD. Fifteen children with ASD (age: 12.00 ± 3.55 years) and twenty age-matched healthy controls (age: 12.83 ± 1.91 years) underwent corneal confocal microscopy (CCM), a rapid non-invasive ophthalmic imaging technique to quantify corneal nerve fiber morphology. Corneal nerve fibre density (fibers/mm2) (28.61 ± 5.74 vs. 40.42 ± 8.95, p = 0.000), corneal nerve fibre length (mm/mm2) (16.61 ± 3.26 vs. 21.44 ± 4.44, p = 0.001), corneal nerve branch density (branches/mm2) (43.68 ± 22.71 vs. 62.39 ± 21.58, p = 0.018) and corneal nerve fibre tortuosity (0.037 ± 0.023 vs. 0.074 ± 0.017, p = 0.000) were significantly lower in children with ASD compared to controls. CCM identifies central corneal nerve fiber loss in children with ASD. These findings, urge the need for further studies to determine if CCM could act as an imaging biomarker for neurodegeneration in ASD.

.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

A Framework for Trauma-Informed Applied Behavioral Intervention (ABA): The Competent Learner Model (CLM) System

Nipa Bhuptani
nipa@abtinstitute.org
Founder & Director Applied & Behavioral Training Institutes- Dubai

ARTICLE INFO

Published on 7th of June 2024.
Doi: 10.54878/rmj3dn27

KEYWORDS

Applied Behavior Analysis (ABA), Competent Learner Model (CLM), Trauma-Informed Care, Multicultural Diversity

HOW TO CITE

A Framework for Trauma-Informed Applied Behavioral Intervention (ABA): The Competent Learner Model (CLM) System. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

This presentation outlines the evolution of ABA service delivery in the United Arab Emirates across the past two decades. Unique challenges & their solutions are demonstrated in relation to three key areas; namely: intervention methodology, staff training & caregiver support. Introducing Behavior Analysis to a region characterized by multicultural diversity as well as establishing a clinical and educational ABA practice has come with a unique set of challenges such as limited access to resources, overcoming professional isolation, navigating ethical dilemmas, and addressing the diverse origins and cultural complexities of clients and staff. Various strategies for overcoming these challenges will be presented with an emphasis on the importance of ethical & compassionate conduct by Behaviorists implementing in multicultural settings. The Competent Learner Model (CLM), an implementation system encompassing a tiered model of education and staff coaching with best practice ABA provides a valuable resource for service providers globally. Shaping individual actions to foster behavior-analytic organizational systems is of paramount importance. This offers insights into interventions, family support, training, and competence building across the field of ABA.

.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Association of Maternal Diabetes and Autism Spectrum Disorders

Mona Alonazi
moalonazi@ksu.edu.sa
Department Of Biochemistry, College of Science, King Saud University

ARTICLE INFO

Published on 7th of June 2024.
Doi: 10.54878/9kk18h49

KEYWORDS

Maternal Diabetes, Neurodevelopmental Outcomes, Hyperglycemia, Oxidative Stress

HOW TO CITE

Association of Maternal Diabetes and Autism Spectrum Disorders. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

This abstract provides a concise overview of the association between maternal diabetes and autism spectrum disorder (ASD), highlighting the key findings of our experimental research in rodent model of autism in addition to a comprehensive review of existing literature. The objective is to examine the potential correlation between maternal diabetes during pregnancy and the risk of ASD development in offspring. Maternal diabetes is associated with an increased risk of adverse neurodevelopmental outcomes in offspring, including ASD. The prevalence of both maternal diabetes and ASD has been steadily increasing over the past few decades. Several studies suggest a significant association between maternal diabetes and an increased risk of developing ASD in offspring, but the exact mechanisms underlying this correlation remain unclear. Exposure to hyperglycemia in utero due to any type of maternal diabetes may increase the potential risk of ASD in offspring through different biological mechanisms: oxidative stress, neuroinflammation, and glutamate excitotoxicity. The topic explores various hypotheses, including the role of gestational hyperglycemia, maternal obesity, inflammation, metabolic dysfunction, and genetic factors in mediating the association between maternal diabetes and ASD. While the exact mechanisms are not fully understood, potential mechanisms such as oxidative stress, altered fetal brain development, and abnormal epigenetic modifications have been proposed. Understanding the association between maternal diabetes and ASD is crucial for early identification, intervention, and prevention strategies. It can help improve prenatal care for mothers with diabetes and contribute to the development of targeted interventions aimed at reducing the risk of ASD in offspring. In conclusion, while the evidence suggests a potential association between maternal diabetes and increased risk of ASD in offspring, further research is needed to establish causality and identify the precise mechanisms involved. Nevertheless, recognizing the link between maternal diabetes and ASD supports the need for intensified prenatal care and close monitoring of metabolic health during pregnancy to optimize maternal and child outcomes.

.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Engaging team members in a teamwork in a remote ABA-service.

Maria Sudarikova
msudarikova@gmail.com
Supervisor for aspiring behavior analysts and teams of resource room projects at public schools.
lecturer and trainer on applied behavior analysis at VCS.

ARTICLE INFO

Published on 7th of June 2024.
Doi:10.54878/bx1pyb09

KEYWORDS

Remote Collaboration, Behavioral Services, Applied Behavior Analysis (ABA)

HOW TO CITE

Engaging team members in a teamwork in a remote ABA-service. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Difficulties in collaboration between different stakeholders in the delivery of behavioral services very often cause conflict and result in termination of services or reduced its quality. In a remote work environment, this problem becomes critical. What can be done to make collaboration more engaging and effective? This presentation will review and discuss strategies for engaging and increasing motivation for collaboration between parents of students with developmental disabilities and ABA specialists.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Neurological Dysfunctions and Non-Neurological Comorbidities in Clinical Manifestations of Autism and Their Role in ASD Development: 15 Year-long Experience in Autism Diagnosing and Treatment

Dr. Kenneth Alibek
kalibek@locusfs.com
MD, PhD, ScD

ARTICLE INFO

Published on 7th of June 2024.
Doi: 10.54878/58wy3q62

KEYWORDS

Neurological Development, Prenatal Phase, Postnatal Phases, Brain Structure Abnormalities

HOW TO CITE

Neurological Dysfunctions and Non-Neurological Comorbidities in Clinical Manifestations of Autism and Their Role in ASD Development: 15 Year-long Experience in Autism Diagnosing and Treatment. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

It has been nearly 80 years since Drs. Asperger and Kanner first identified the condition known today as Autism or ASD. Subsequently, it has been officially established that autism is a multifaceted anomaly in the maturation of the neurological system, typically detected during early life. Nevertheless, this pathological condition progresses through several underlying stages of growth, commencing in the prenatal phase and evolving into an autistic phenotype during the early and later postnatal phases.Significant deviations in the brain and neurological system structure and function characterize autism. The initial clinical manifestations of autism include sensory impairments such as distorted perception of auditory, visual, gustatory, olfactory, and tactile stimuli and motor dysfunction characterized by diminished motor abilities, gait abnormalities, oculomotor dysfunction, and similar symptoms. These diseases occur before obvious neuropsychiatric symptoms manifest, such as behavioral abnormalities, learning impairments, and the inability to interact verbally and nonverbally. It is crucial to acknowledge that these sensory abnormalities significantly contribute to the autistic child's failure to develop the typical behavioral, linguistic, and motor skills. In autism, sensory overloads and distortions hinder the ability to perceive and integrate information, thereby affecting typical development, learning, and adaptation. In addition, sensory distortions in individuals with autism can result in several other manifestations of autism, including anxiety, restlessness, insomnia, compromised cognitive functioning, exhaustion, underdeveloped problem-solving abilities, and impaired decision-making skills. In addition to the above symptoms, there is a lack of attention given to several other signs and manifestations of these illnesses. Based on my extensive 15-year experience studying and treating several hundred children with autism, including those complicated with cerebral palsy and epilepsy.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Old Truths, New Ideas: The Past, Present, and Future of ABA

Tracy Guiou[1], Jill Young[2]
jillyoungca@gmail.com
PhD, BCBA-D [1,2]

ARTICLE INFO

Published on 7th of June 2024.
Doi: 10.54878/wtgh4q74

KEYWORDS

Applied Behavior Analysis (ABA), Principles of Behavior, Scientist - Practitioner Model, Behavioral Science

HOW TO CITE

Old Truths, New Ideas: The Past, Present, and Future of ABA. (2024). *Autism Challenges and Solutions,* 2(1).

ABSTRACT

The discovery of the Principles of Behavior was the result of experiments conducted by a small group of scientists in laboratory settings with non-human subjects. These experiments suggested that behavior was not only lawful and predictable but could be controlled given the correct application of contingencies. When these same principles were applied to important human behavior in natural settings that the same effects on behavior occurred. And just like that, "Applied Behavior Analysis" emerged. Since the 1960's, ABA has made a significant and positive impact on the quality of lives of countless individuals. The "scientist-practitioner" model advanced the practice by remaining science-based and producing a large body of evidence demonstrating that treatment procedures were technical, replicable, conceptually systematic, effective, and adept to generality. We now possess a powerful science. The effectiveness is so powerful that there has been rapid growth over the past 10 years in the number of practitioners, availability of funding sources, and demand for access to treatment. This is a good thing, right? This presentation will discuss the answer to that question by exploring new ideas, approaches, and practices that are growing in popularity within the field of behavior analysis. The questions we should ask to evaluate the functional value of new treatment approaches and the need for on-going clinical practice standards to ensure we remain a *science of human behavior*. During the presentation we will review some "old" treatment approaches and examine emerging "new" treatment approaches, cultural considerations, and impact of rapid growth has had on the quality of ABA services.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

The Role of Primary Healthcare Providers in Early Screening and Identification of Markers for Rare Comorbid Manifestations of Autism

Hawk M. Kair
hawk.kair@ajch.ae
Autism Spectrum Disorders Program - Behavior Disorders Psychologist Mental Health Centre of Excellence

ARTICLE INFO

Published on 7th of June 2024.
Doi: 10.54878/q2hsk094

KEYWORDS

Autism Spectrum Disorder (ASD), Early Detection, Primary Healthcare Providers, Comorbid Rare Diseases

HOW TO CITE

The Role of Primary Healthcare Providers in Early Screening and Identification of Markers for Rare Comorbid Manifestations of Autism. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Although Autism itself is not considered a rare neurodevelopmental disorder, it is closely linked with several neurodevelopmental rare diseases. Early surveillance, detection, screening, and referral pathways are essential steps to lead to and inform an evidence-based diagnosis of autism spectrum disorders. The role of primary healthcare providers in early screening and identification of early signs of autism spectrum disorder, phenotypes, and behavioral symptoms is essential and instrumental in early identification of comorbid rare disease and access to early medical care. Exploring the role of primary healthcare providers in identifying markers for rare comorbid manifestations of autism in primary healthcare is a systematic process to quickly identify any early indicators of autism spectrum disorder and identifying markers for rare comorbid manifestations of autism in primary healthcare. It is an integral pathway to inform and facilitate a cohesive and comprehensive multi-disciplinary diagnostic protocol.The attendees will be introduced to the targeted functions of standardised screening questionnaires, parental interview forms and checklists covering a broad indication of issues relevant to general behavior, communication, sensory issues, ASD and/or social communication difficulties, any special interests and developmental, as well as an indication of whether more in depth diagnostic assessment is advisable for further investigations of comorbid genetic and /or rare diseases. Finally, we will look at how to draw and use essential preliminary information that will contribute to an initial clinical impression indicating the need for further diagnostic assessments and unlocking in-depth assessment and specialized medical and behavioural care pathways.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Autism Spectrum Disorder and Autism Condition - identifiable by Rockence Genetic Behavior Science

Mohammed Ibrahim Al Ali[1], Elizabeth Percy[2]
ceo@smartinspirationuae.com
Visionary Founder and CEO at SMART INSPIRATION UAE TRAINING [1]
Chief Trainer at SMART INSPIRATION UAE TRAINING [2]

ARTICLE INFO

Published on 7th of June 2024.
Doi: 10.54878/gttfev88

KEYWORDS

Epigenetics Utero, Environmental Conditions, Friction Ridge Patterns, Behavioral Analysis

HOW TO CITE

Autism Spectrum Disorder and Autism Condition - identifiable by Rockence Genetic Behavior Science. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Behavioral challenges have its linking to epigenetics and utero-environment. These formations of challenges are governed by the placental functions and dysfunction, neurotransmitter metabolism, Gut microbiome, stress-induced hypothalamic-pituitary-adrenal response etc. as the traces in the gestational environment. The research indicates each utero-environmental occurrence leaves its traces as forms of waves on to the epithelium of the ectoderm as mechanical instability marks thanks to the Merkel cells and epithelial neuroendocrine cells.Rockence Genetic Behavior Analyzes captures and delves into the epigenetics that link to utero-environmental conditions during gestation, which leaves its permanent markings as friction ridge patterns. Each friction ridge pattern such as thickness, angular deviation, minutiae, ridge distortions etc. has its history of tell-tale as stand-alone trait., and two or more traits cross-modulate each other to form displayable behavior patterns. Employing complex algorithms compounded to establish the linking to existing behavioral theories in a form of trait identification generates a comprehensive report for easy-to-understand format for further professional intervention.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Integrative medicine approach in the inhibition of 1C (PPP1R1C), RHOA containing receptor 3 (SORC3). ASD, intellectual disability (ID), for management of Statistical Manual of Mental Disorders (DSM) among autistic children with grade one.

Prof.Ather A [1], Dr. Abdul Aziz Ahmed Al Jaziri[2]

ather.a@emanet.org

Scientific committee - Integrative medicine - European Medical Association, Germany[1]

Recipient of Sheikh Hamdan Award, Innovator of JET - Energy therapies - Dubai.[2]

ARTICLE INFO

Published on 7th of June 2024.
Doi: 10.54878/nch00b20

KEYWORDS

Genomic Studies, Non-Invasive Treatment, Gene Regulation

HOW TO CITE

Integrative medicine approach in the inhibition of 1C (PPP1R1C), RHOA containing receptor 3 (SORC3). ASD, intellectual disability (ID), for management of Statistical Manual of Mental Disorders (DSM) among autistic children with grade one. (2024). *Autism Challenges and Solutions*, *2*(1).

ABSTRACT

Autism was first described by in a detailed report of 11 children with similar unusual tendencies. Intriguing common symptoms such as improper facilitation of language, indifference to other people, and obsessive interests can clearly be discerned while reading Kanner's thorough patient history. Twenty-three years later, the first epidemiological study of autism estimated prevalence to be 4.5 per 10,000 individuals. Estimates have since increased drastically to 1 in 59 individuals affected, with at least three times as many males diagnosed as female. This significant increase in prevalence is partially attributable to both increase in awareness and evolvement of Diagnostic and Statistical Manual of Mental Disorders (DSM) criteria, from a childhood form of schizophrenia in 1952, In 2013, the Cross-Disorder Group of the Psychiatric Genomics Consortium (PGC) conducted a massive study with 33,332 cases and 27,888 controls in order to identify pathogenic variants shared between ASD, schizophrenia, bipolar disorder, ADHD, and major depressive disorder. Recently hypothesized that abnormal gene regulation in radial glia and interneurons during mid-gestation is a mechanism of shared risk, after using GWAS to identify susceptibility loci in genes including phosphodiesterase 1A (PDE1A), protein phosphatase 1 regulatory inhibitor subunit 1C (PPP1R1C), RHOA, immunoglobulin superfamily member 11 (IGSF11), and sortilin related VPS10 domain containing receptor 3 (SORC3). ASD, intellectual disability (ID), and schizophrenia have been found to share risk loci in FMRP targets, CHD5, CHD8, SCN2A. An integrative approach was taken forward to find a non-drug - non invasive approach in inhibiting the protein phosphatase 1 regulatory inhibitor subunit 1C (PPP1R1C), RHOA , and it was observed that clearing the liver with toxins from "De -Liverance" , constant - ve ions and ionised water and food , Ghaaf leaves with coffee as ghaaf leaves contain hydrocarbons and phenolic acid derivatives inhibited the mutations of SORC3 the receptor of ASD both in the blood studies as well as in the volunteers , the dose was escalated after the blood and genomic studies in the lab . This gives way for further studies in creating a monogram for better quality of life among ASD children and inhibiting the genomes at the right time in a natural way.

Proceedings *of Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

Best Practices in Sex Education for Autistic Learners

Amanda Tami
atami@johnson-center.org
Board Certified Behavior Analyst and a Licensed Professional Counselor at The Johnson Center for Child Health & Development in Austin, Texas.

ARTICLE INFO

Published on 7thJune 2024
Doi: 10.54878/nj70hk44

KEYWORDS

Sex Education, Autism Spectrum Disorder (ASD), Sexual Knowledge, Behavior Analysis

HOW TO CITE

Best Practices in Sex Education for Autistic Learners. (2024). *Autism Challenges and Solutions*, 2(1).

ABSTRACT

The purpose of sex education is to facilitate the gaining of knowledge, skills, and values to make healthy and informed sexual decisions. There is limited research on sexuality and individuals with autism spectrum disorder (ASD) in the field of behavior analysis, but we do know that people with such conditions tend to have less sexual knowledge than their neurotypical peers. As parents, educators, and service providers, we can share information on sexual behavior in effective ways tailored to the developmental abilities of those we serve on the autism spectrum, empowering them to make informed decisions about their bodies, relationships, and values. This presentation will describe current challenges related to sexuality and disabilities, review current behavior analytic research on sexuality, and discuss best practices for teaching learners about sexuality to improve health, safety, and quality of life.

Proceedings of *Autism Challenges and Solutions XII International Research and Practice Conference*, ABU-DHABI UAE, 27-30th April 2024. Published and Indexed by Emirates Scholar Center for Research and Studies.

GABA and Glutamate Imbalance in Autism and Their Reversal as Novel Hypothesis for Effective Treatment Strategy: An update

Afaf El-Ansary
afafkelansary@outlook.com
Autism Center, Lotus Holistic Alternative Medical Center, Abu Dhabi, United Arab Emirates

ARTICLE INFO

Published on 30th May 2024
Doi: 10.54878/

KEYWORDS

Autism spectrum disorder, physical activity, GABA, glutamat0065, autism

HOW TO CITE

GABA and Glutamate Imbalance in Autism and Their Reversal as Novel Hypothesis for Effective Treatment Strategy: An update. *Autism Challenges and Solutions* 2(1)

ABSTRACT

Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by reduced social communication and repetitive behaviors. The etiological mechanisms of ASD are still unknown; however, the GABAergic system has received considerable attention due to its potential as a therapeutic target. Based on the fact that individuals with autism demonstrate altered gene expression concomitant with impaired blood brain barrier (BBB), and gut barrier integrities, so increased glutamate levels in the blood and platelets of ASD patients can be related to lower numbers of cerebellar GABAergic neurons, less active GABA-synthesizing enzymes, and decreased brain GABA levels. Excitotoxic levels of released glutamate trigger a cascade of deleterious cellular events leading to delayed neuronal death. According to our understanding of glutamate excitotoxicity, GABA supplementation could theoretically be useful to treat certain autistic phenotypes. While there is still no effective and safe medication for glutamate-related cell damage and death, combined efforts will hopefully develop better treatment options. Here I hypothesize that an integrated treatment strategy with GABA supplements, regulation of chloride (Cl-) and magnesium (Mg2+) levels, vitamin D supplements, probiotics to enhance GABAA receptor and glutamate decarboxylase (GAD) expression, and memantine to activate glutamate transporters and inhibit NMDA receptors, could collectively reduce glutamate levels, maintain functional GABA receptors and thus treat repetitive behavior, impaired social behavior, and seizure activity in individuals with autism.

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

Together We Can Make a Difference

معـــاً يمكـــننا إحـــداث الفـــرق

XII

مؤسسة زايد العليا
لأصحاب الهمم
Zayed Higher Organization
for People of Determination

IJACS

VOL 1 | ISSU1 | 2024

International Journal for Autism Challenges & Solution

المجلة الدولية لتحديات وحلول التوحد

DOI : 10.54878/IJACS

باحثي الامارات
EMIRATES SCHOLAR
بوابة بحثية متخصصة

LOTUS Holistic

الإمارات
THE EMIRATES

Autism. Challenges and solutions

XII International Annual Conference & Exhibition

Abu Dhabi 2024

Together We Can Make a Difference

معـــاً يمكـــننا إحـــداث الفـــرق

XII

International Autism Conference

27 - 30th April / 2025

Abu Dhabi

Follow us

Visit Our

Connect Us

معـــاً يمكـــننا إحـــداث الفـــرق

Together We Can Make a Difference