## BRIDGE - DEMENTIA PREVENTION AND THERAPY

MAREK MALYSA

### **DEMENTIA PREVENTION**

- ► WE ALL FEEL THAT PLAYING BRIDGE HELPS TO PREVENT DEMENTIA
- ► COGNITIVE RESERVE IS BUILT UP DURING PLAY
- ► IT JOGS THE BRAIN

BUT THE ONLY RESEARCH RESULTS SHOWING THAT BRIDGE MAY PREVENT ALZHEIMER'S COMES FROM M.C.DIAMOND

#### DEMENTIA PREVENTION

- ► IN POLAND WITHIN THE "BRIDGE60+" PROGRAM, 310 CLUBS WERE CREATED TO ALLOW OLDER PEOPLE LEARN AND PLAY BRIDGE, AVOIDING SOCIAL ISOLATION AS WELL
- ► TO CONFIRM THE PREVENTATIVE EFFECTS OF PLAYING BRIDGE, A FOUNDATION "BRIDGE TO THE PEOPLE" HAS BEEN CREATED
- ► RESEARCH STARTED IN JUNE 2019, FINANCED AND ORGANIZED BY THIS FOUNDATION
- ► FUNDS CAME FROM EBL, PBU, IBF, ACBL AND PRIVATE DONORS FROM POLAND AND USA

### PROCEDURE AND TOOLS

- SCIENTISTS DEFINED METHODOLOGY AND STANDARDISED TOOLS
- ► IN RETIREMENT HOMES, TWO GROUPS OF OLD PEOPLE WERE SELECTED RANDOMLY: "BRIDGE" AND "CONTROL", WITH 30 PEOPLE IN EACH
- ► BOTH GROUPS HAD STANDARD ACTIVITIES BUT THE "BRIDGE" ONE WENT TO BRIDGE LESSONS AND PLAY, FOR 3 HOURS A WEEK
- SOME PARTICIPANTS ARE DISABLED AND SOME WITH MILD COGNITIVE IMPAIRMENT (MCI)

### INITIAL TESTS AND CHECKS

- ► ALL PARTICIPANTS FROM BOTH GROUPS INITIALLY HAD THE FOLLOWING TESTS AND MEDICAL CHECKS:
  - MMSE (Mini-Mental State Examination)
  - GDS (Geriatric Depression Scale)
  - CDT ( Clock Drawing Test )
  - PERMA WELL-BEING TEST (by Martin Seligman)
  - BDNF (Brain-Derived Neurotrophic Factor)
  - Iridine check

### **FUTURE STEPS**

- ► AFTER 18 WEEKS OF BRIDGE LESSONS AND PLAY COMBINED WITH OTHER STANDARD ACTIVITIES, ALL TESTS AND CHECKS WILL BE DONE AGAIN
- ► IN MARCH / APRIL TITULAR PROFESSORS WILL STUDY RESULTS AND PROCESS ALL DATA
- ► FROM THIS BASE, THE FOUNDATION WILL CONDUCT THE MAIN RESEARCH ON POPULATION OF 180 PEOPLE
- ► FINAL RESULTS SHOULD BE READY BY END 2020
- ▶ WE HOPE THEY WILL CONFIRM M.C.DIAMOND'S RESULTS





## **CRUCIAL QUESTION**

► IS THERE ANY RISK THAT THE PROBLEM IS MORE COMPLEX AND THOSE WHO WILL LEARN BRIDGE HAVE BETTER COGNITIVE ABILITIES ?

► SOME SERIOUS SCIENTISTS ASKED ME THAT QUESTION AND I TRIED TO FIND AN ANSWER

► THATS HOW, HONESTLY BY THE WAY, WE FOUND A SERIOUS SOLUTION TO THIS PROBLEM

### **ALZHEIMER'S CENTRE EXPERIMENT**

- ► IN APRIL 2018 WE ASKED ALZHEIMER'S CENTRE IN WARSAW TO ALLOW US TEACH BRIDGE TO THEIR PATIENTS WITH MCI (IT'S A STAGE OF ALZHEIMER'S PRIOR TO THE CLINICAL STAGE)
- ► 20 PATIENTS STARTED TO LEARN BRIDGE (A SIMPLE ONE WITHOUT BIDDING) FOR 2 HOURS A WEEK
- ► INITIALLY THEY COULDN'T COUNT TO TEN AND HOLD CARDS PROPERLY
- ► 13 OF THEM LEARNED BRIDGE AND STARTED EASY COUNTING, TAKING TRICKS, MAKING SIMPLE PLANS ETC



## THERAPY?

- WE RANDOMLY CHOSE SAME NUMBER OF MCI PATIENTS AS "BRIDGE" GROUP, HAVING OTHER KINDS OF THERAPIES ALSO
- ► BOTH GROUPS HAVE BEEN INITIALLY TESTED WITH MMSE (MINI-MENTAL TEST - IT IS THE ONLY ONE THAT MCI PATIENTS CAN CO-OPERATE WITH)
- ► AFTER ONE YEAR, WE CONDUCTED MMSE TEST AGAIN AND COMPARED AVERAGE LOSS OF COGNITIVE ABILITIES BETWEEN THE TWO GROUPS

## THERAPY?

- RESULT WAS IN FAVOR OF "BRIDGE" GROUP
- ► THEIR AVERAGE LOSS OF COGNITIVE ABILITY IN MMSE TEST WAS ALMOST HALF THAT FOUND IN "CONTROL" GROUP
- ► OF COURSE, AS IT IS A MORE COMPLEX PROBLEM, WE CAN'T SAY FOR SURE THAT BRIDGE THERAPY IS THAT MUCH BETTER THEN OTHER ONES BUT.....
- ▶ WE CAN SAY IT'S EFFECTIVE THERAPY !!
- ► IN 2020, FOUNDATION WILL REPEAT BRIDGE THERAPY IN 4-5 NEW ALZHEIMER'S CENTRES AND .... WE WILL KNOW MORE

## HOW SERIOUS OUR RESEARCH IS?

- SCIENTIFIC COUNCIL OF "BRIDGE TO THE PEOPLE" FOUNDATION IS AN INTERNATIONAL GROUP OF ACADEMICS SPECIALISING IN GERIATRY, GERONTOLOGY, PSYCHOLOGY, EDUCATION, SOCIOLOGY AND SPORTS PHYSIOLOGY
- ► RESEARCH TEAM IS ALSO AN ACADEMIC ONE
- ► IN 2020, WE PLAN TO START RESEARCH IN THE IMMUNOLOGY FIELD TO PROVE THAT PLAYING BRIDGE MAY BOOST IMMUNE SYSTEM (ALSO FOLLOWING M.C.DIAMOND'S PILOT RESEARCH ON 12 OLD PEOPLE). PROCEDURE, TOOLS AND TEST REAGENTS AS WELL AS RESEARCH GROUP ARE READY TO PROCEED. WE ARE SEEKING FUNDS FOR THIS RESEARCH



## OTHER RESEARCHERS

- ► IN THE PHOTO ABOVE, ON MY LEFT IS OUR SCIENTIFIC COUNCIL MEMBER, PROF. BRUNO VELLAS FROM THE UNIVERSITY HOSPITAL IN TOULOUSE. HE IS CHIEF OF GERIATRY AND GERONTOLOGY THERE AND ALSO A MEMBER OF THE FRENCH ACADEMY.
- ► BRUNO IS GOING TO START A MASSIVE AND LENGTHY RESEARCH PROGRAMME ON AGING, INCLUDING THE INFLUENCE OF PLAYING BRIDGE. UNLUCKILY, WE WILL HAVE TO WAIT 10 YEARS FOR THE FINAL RESULTS

# SAMANTHA PUNCH AND SOCIOLOGY OF BRIDGE - FIRST BRIDGE PHD



## INTERNATIONAL SCIENTIFIC CONFERENCES DEDICATED TO BRIDGE

- ► VERY FIRST ONE TOOK PLACE IN TORUŃ IN 2017
- SECOND ON IN TORUŃ AGAIN IN 2018
- ► THIRD ONE ORGANISED BY TIHANA IN ZAGREB
- ► FOURTH IS SCHEDULED FOR 2021 IN STIRLING
- ► WE WILL KEEP YOU INFORMED ABOUT OUR RESULTS
- ► WE HOPE YOU WILL BE ABLE TO USE THEM IN ALL EBL MEMBER COUNTRIES TO PROMOTE BRIDGE AND TO OPEN DOORS TO FUTURE SPONSORS OF OUR GREATEST MIND GAME !!

## THANK YOU